GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

MA&UD - Real –Time Monitoring System (RTMS) for Sanitation and Solid Waste Management Activities in ULBs – Developing Software Application and Operations and Maintenance of call Center at Command and Communication Center at IGC Velagapudi – RFP prepared for Package-1 – Approval of RFP and Constitution of Technical Evaluation Committee - Orders – Issued.

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (B2) DEPARTMENT

G.O.RT.No. 657 Dated: 19-09-2017
Read:

From the Director, APMDP. No. 14026/13/2017-CES SEC., dt.019.2017.

ORDER:

Government in G.O.Ms.No.279, MA&UD (B2) Department, dt.31.12.2015 have issued Operational Guidelines for micro planning, work rationalization and outsourcing of work packages for maintenance of sanitation and Solid Waste Management activities. In the said orders, it was stipulated that web, mobile and GPS enabled tools shall be developed for regularly monitoring the service delivery arrangement. The guidelines also contained a set of service delivery performance indicators (KPIs) for which the service level benchmarks and relative weightages for levying penalties for service failure were specified.

2. Accordingly in reference read above, the Director, APMDP has proposed for approval of RFP prepared for Package-I and constitution of Technical Evaluation Committee for developing software Application and Operations and Maintenance of Call center of Command and Communication Center at IGC, Velagapudi under Real time Monitoring System for Sanitation and Solid Waste Management Activities in ULBs. While explaining the above and requested to issue necessary orders.

3. Government after careful examination, keeping in view of the guidelines issued in G.O.Ms.No.279, for effective maintenance of sanitation and solid waste Management activities in ULBs, hereby approved the proposal of the Director, APMDP for selection of solution provider as appended to this order, duly directing the PD., APMDP to call for tenders through e-procurement platform, by adopting the basic principles of procurement like transparency, equitable opportunity and rational evaluation of bids.

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4. Govt. also hereby constitutes a Technical Evolution Committee consisting of the following for finalization of tenders:

1. Principal Secretary to Government, MA&UD Dept. …. Chairman
2. Director of Municipal Administration …. Member
3. Representation of ITE&C department ….. Member
4. Procurement Specialist, APMDP ….. Member
5. External Expert from NIC …… Member

5. The Project Director, Andhra Pradesh Municipal Development Project, Guntur is therefore requested to take necessary action in the matter.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

R. KARIKAL VALAVEN,
PRINCIPAL SECRETARY TO GOVERNMENT.

To
The Project Director,
Andhra Pradesh Municipal Development Project, Guntur.
The Director of Municipal Administration, Guntur.
Copy to:
The OSD to Hon'ble Minister for MAUD.
The PS to Principal Secretary to Govt., MAUD Department.
Sf.

// FORWARDED:: BY ORDER //

SECTION OFFICER.

GOVERNMENT OF ANDHRA PRADESH
MUNICIPAL ADMINISTRATIONAND URBAN DEVELOPMENT DEPARTMENT
DIRECTOR OF MUNICIPAL ADMINSTRATION
AMARAVATI

REQUEST FOR PROPOSAL (RFP)

for

Developing Real-Time Monitoring System (RTMS) Software Applications for Package - 1

and

Operations and Maintenance of Command and Communication Center

On Design, Build, Operate, and Transfer (DBOT) Model

(Ref. No. 07/14026/13/2017/CES SEC-APMDP Dated: 28/08/2017)

Issued By:

Project Director, Andhra Pradesh Municipal Development Project
Kavya sri Residency, 1st Floor, MG Inner Ring Road,
Reddypalem, Guntur, AP - 522509

Letter of Invitation

Dated: 28/08/2017

RFP Notification No: 07/14026/13/2017/CES SEC-APMDP **Date: 28/08/2017**

On behalf of the Commissioner and Director of Municipal Administration (CDMA) of Government of AP, the Andhra Pradesh Municipal Development Project (APMDP), on invites techno commercial proposals for developing a Real-Time Monitoring System (RTMS) Software Application along with undertaking the Operations and Maintenance of the Command and Communication Center (CCC) situated at the Interim Government Complex (IGC), Velagapudi, Guntur, AP. The RTMS is developed for real time monitoring of various services provided by the 110 Urban Local Bodies (ULB) in the State of Andhra Pradesh and the project owner is CDMA. The project is offered on Design, Build, Operate and Transfer (DBOT) Model. Firms and business entities of repute that have expertise and experience in delivering such combined solutions of developing software applications, along with supply, installation, commissioning, and maintenance of video walling, video streaming, teleconferencing, EPBX Telephony, CRM and such hardware can participate in this RFP. Consortiums or Joint venture entities of not more

than two members can also participate in the bidding process. For the purposes of eligibility and evaluation of the technical proposal, the combined strength (financial turnover and work experience) of both the consortium / JV partners can be considered.

The software and associated hardware infrastructure should be designed, installed, commissioned and be operated for a period of three years, with unconditional comprehensive maintenance contract. The quality service provider is likely to get another two years extension at the discretion of the CDMA. The services are procured through e-procurement process. The proposal selection will be on the basis of a combined Quality cum Cost Based Selection (QCBS) method. The weightage given to technical and financial scores are in the ratio of 70:30 respectively. The software and the hardware infrastructure built for the purpose shall be handed over to Commissioner and Director of Municipal Administration (CDMA) at the end of the project period.

Bidders are invited to submit their Proposals before the time and date through the e-procurement portal https://tenders.apeprocurement.gov.in/. The Proposals submitted after this time and date will **not** be considered under any circumstances, unless notified by the APMDP with full information of the altered date and time, as a Corrigendum in the e-procurement portal.

Proposal Data Sheet		
Sl. No.	**Event Description**	**Particulars**
1	Project Scope	Developing a Real-Time Monitoring System (RTMS) Software Application and undertaking Operations and Maintenance of Command and Communication Center on Design, Build, Operate and Transfer (DBOT) Model
2	RFP document download start date and time	Date 29-08-2017 Time: 11.00AM
3	RFP document download end date and time	Date 11-09-2017 Time 02.00PM
4	Proposal submission closing (Proposal Due) date and time	Date 12-09-2017 Time 02.00PM
5	Name, Address, contact numbers, e-mail id of the authorized official for clarifications	Sri A.L.Mal Reddy, Procurement Specialist, MSU- APMDP , MG Inner Ring Road, Guntur. eMail: ps.apmdp@cdma.gov.in M: 9849453458
6	Last Date for submission of queries for Pre-Proposal meeting	Date 31-08-2017 Time 05.00PM
7	Date of Pre-Proposal	Date 04-09-2017 Time 02.00PM

	Meeting	
8	Place of Pre-Proposal meeting	O/o APMDP, MG Inner Ring Road, Guntur.
9	Date for uploading the clarifications for queries.	Date 05-09-2017 Time 05.00PM
10	Date & Time for opening of Technical Proposal - Part 1 (Qualification Criteria)	Date 12-09-2017 Time 04.00PM
11	Date & Time for opening of Technical Proposal – Part 2 (Technical Evaluation Criteria)	Intimate later
12	Date & Time of opening of Financial Proposal	After evaluation of technical Proposal, will be intimated to the qualified Bidder.
13	RFP Transaction Fee (payable to AP Technology Services; Non-Refundable)	The amount and mode of payment is as indicated in the e-procurement portal.
14	RFP Processing Fee	Rs. 20,000 (Rupees Twenty Thousands) payable to Commissioner and Director of Municipal Administration (CDMA), Gorantla Guntur, by a Demand Draft drawn on any Scheduled Commercial Bank.
15	Earnest Money Deposit	The Bidder has to deposit **Rs.5,00,000/-** **(in words: Five Lakhs**) a**s the EMD** through Net-banking / RTGS / NEFT from the Bidder's registered bank account only in favour of the entity as indicated in the e-procurement portal. (will be refunded to the unsuccessful Bidder after the completion of Proposal Selection Process)
16	Performance Guarantee	The Successful Bidder needs to execute a Performance Bank Guarantee of 10% of the Annual Contract value in the form of an irrevocable Bank Guarantee.

Disclaimer

The Bidder is required to consider only those terms and conditions provided in this RFP document (RFP) and subsequent corrigendum if any, issued in the e-tender portal - https://tenders.apeprocurement.gov.in/

This RFP is not an agreement and is neither an offer nor invitation by the APMDP to the prospective Bidder or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in making their financial offers (Proposals) pursuant to this RFP. This RFP includes statements which reflect various assumptions and assessments arrived at by APMDP in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. Each Bidder should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP document.

Information provided in this RFP document is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The APMDP accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The APMDP, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP document, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this Proposal.

The APMDP also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused, arising from reliance of any Bidder upon the statements of information contained in this RFP.

The APMDP may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP, communicated in the form of a Corrigendum.

The issue of this RFP does not imply that the APMDP is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and the APMDP reserves the right to reject all or any of the Bidder or Proposals without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of the Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the APMDP or any other costs incurred in connection with or relating to the Proposal. All such costs and expenses shall be borne by the Bidder and the APMDP shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by the Bidder in preparation or submission of the Proposal, regardless of the conduct or outcome of the Proposal selection.

1. SECTION -1: SCOPE OF WORK

1.1. PROJECT BACKGROUND

1.1.1. The Government of Andhra Pradesh has developed a profound vision of transforming the service delivery efficiencies of the departments through extensive adoption of Internet of Things (IoT) and Information and Communication Technology (ICT) tools. The Directorate of Municipal Administration has taken up a lead role in this aspect and has been adopting a host of technology tools for modernizing the governance and providing citizen services that are easily accessible and technology enabled.

1.1.2. In the Urban Local Bodies (ULBs), online access has been created to enable the citizens obtain building permission, birth and death certificates, and also pay taxes such as property taxes, vacant land taxes, water charges, advertisement tax etc., The online service mode enables the citizen access the services quicker, simpler, easier and at any time.

1.1.3. Most importantly, the ULBs create and maintain several types of civic infrastructure and provide related services such as those indicated below.

- Engineering works (construction and maintenance) – roads, buildings, drains, water supply, street lighting, market complexes, parks, function halls, sports grounds, stadia, cemeteries and similar types of public utilities.
- Town Planning – City Master Planning, Land and Estate Management
- Sanitation and Solid Waste Management – drains cleaning, street sweeping, solid waste collection and transportation, creating and maintaining waste storage and disposal facilities and vector control activities,
- Public Health - mosquito control, vaccination and disease and epidemics control
- Municipal Schools
- Municipal Hospitals

1.1.4. As these above services involve planning, budgeting, engineering, construction and assets creation activities, the department has taken up integration of all these activities on enterprise resource planning (ERP) platform. The ERP initiative is for improving the efficiencies of the revenue, finance, engineering, works, administration and citizen services functions. To empower the citizen with access to provide feedback and register complaints, the department has come up with a mobile and internet enabled Public Grievance Redressal (PGR) Application, by the name '*Puraseva'*. This System helps to capture visual pictures of service failures in any type of civic amenity and to automatically trigger redressal actions. After the redressal, the citizen is given feedback and data analysis of the complaints is being done to take timely preventive and corrective actions. Majorly the PGR application provides grievance registration & redressal interface to the citizens. The application also provides for automatic escalation mechanism for grievance redressal and citizen feedback. Using this application, citizen can raise grievances on any of the municipal services examples of which are:

- Conditions of roads, buildings, drains, drinking water pipelines, street lights etc., ,
- Public sanitation, unhygienic conditions, water stagnation, mosquito spread, solid waste removal etc.,
- Municipal Schools, Municipal Hospitals
- Parking, Tree Plantation, Stray Animals menace etc.

1.1.5. **Technology enabled Monitoring of Sanitation and Solid Waste Management Services (GO 279implementation):** The Government of Andhra Pradesh has issued a Government Order GO Ms. No. 279 dated 31.12.2015, to streamline the services related to maintenance of Sanitation and Solid Waste Management. Through this programme, collection and transportation of solid waste and sanitation activities such as road sweeping, drains cleaning and vector control activities in ULBs will get streamlined. The service elements are rolled into work packages and are getting outsourced to private service providers as long term (3-5 years) service contracts. To ensure 100 % service coverage and improvement in the service quality and accountability levels, certain Key Performance Indicators (KPIs) have been identified in the contract service terms, and the payments to the service providers (contractors) are tied to the achievement of these performance indicators. For real time monitoring of the service providers technology based IOT and ICT tools and systems are required. The Government envisages similar streamlining and reform interventions to improve the efficiency of other services also.

1.1.6. Having brought in systems streamlining and reform interventions, and also putting in place the ICT enabled interventions as described above, the department currently

intends to create a **Real-Time Monitoring System (RTMS) consisting of Internet of Things (IoT) and IC Technologies (ICT)**.The RTMS outputs are expected to assist the municipal administration to continuously assess the performance efficiencies of the service providers of various municipal services and initiate timely corrective and improvement actions. The desired RTMS will consist of a host of technology based application solutions such as live video streaming, video wall monitoring, geo-tagging, electronic weighment, RFID, GPS, Internet, Database, IVRS, Bulk SMS, Android and Mobile technologies. To facilitate centralized monitoring and collaborative decision making, the Government has established a state-of- the-art and modern Command and Communication Center (CCC) in the Interim Government Complex (IGC) at Velagapudi, Andhra Pradesh. The CCC is fully equipped with required video walling infrastructure, computer hardware, furniture and other accessories.

1.2. PROJECT REQUIREMENTS

1.2.1. In this background, the department intends to procure the services of a System Integrator / Solution Provider to deliver Two Components of services - Component 1 for CAPEX based deliverables and Component 2 for OPEX based deliverables.

1.2.2. CAPEX based Deliverables:

1.2.2.1. Deliverable Component 1A: RTMS Software Application Development and Software Installation in the CCC along with requisite hardware devices

The scope for this component includes 'Designing, Building, Commissioning a suite of Real-time Monitoring System (RTMS) Software Applications with the features as indicated below. The RTMS application solution should be a single package offer. The Software Application System will be considered as one Single Service offer which includes all the costs incurred by the developer for the compete software application development including software licenses, testing, installation and commissioning as per the requirements.

The software modules within the delivered application should be capable of field monitoring the specified activities in all the 110 ULBs of the State simultaneously.

a. Integrated Software Application with the following functionalities:
    i. Capture and transmit real time video streams & snapshots up to the MA&UD Command and Communication Centers, at the IGC, Velagapudi and other places as specified by the department from time to time.– Uninterrupted and seamless data feed to the CCCs. The inputs of video streaming can come through vehicle (2,3&4 wheelers)

mounted cameras and also stationary CCTV cameras.

ii. Projection of video and snap shot pictures on the Video Walls

iii. Creating a dynamic inventory of Black Spots (places of vulnerability for unsanitary conditions) in all the ULBs

iv. Monitor the movement of the service providers and assets within the service areas through monitoring of Door to Door coverage using RFID tags.

v. RFID card recognition and weighment data transfer from specially configured weighment scales to the Application Server.

vi. Vehicle tracking of secondary transportation trucks, vehicle compactors and other specified vehicles

vii. Integration Module with Public Grievance Redressal (PGR)- 'Puraseva' Application of the department of MA&UD.

viii. Employee attendance monitoring through Aadhaar linked biometric finger printing

ix. Capturing Staff Salary, PF and ESI payment details including verification and authentication from the banks and PF, ESI organizations

x. Building monthly Performance Score Cards for each of the Work package to measure the performance efficiency of the Solid Waste Management Service providers (Residential, Commercial and Mechanical Road Sweeping Work packages): This activity should be in accordance to the KPIs based performance measurement system specified in GO Ms. No. 279 dated 31.12.1015 of the department of MA&UD, Government of Andhra Pradesh. The Score Cards building module should include the following aspects, for which input data have been gathered through the software functions detailed above from Cl. 1.2.1 b (i to viii).

    a) Service Coverage in the allocated areas (In synchronization with geo tagging module.)
    b) Segregated Collection -Weighment at Micro Pocket Transfer Point and at the Designated Place (in synchronization with micro pocket level waste weighment module)
    c) Dust free and litter free roads, Free flow drains without chocking (in synchronization with Black Spot Management and Citizen Complaints inputs in the PGR application)
    d) Citizen Complaints & Resolution within 24 hours (in synchronization with Citizen Complaints redressal process and response time and quality of grievance redressal by the service providers in the PGR application).

e) Payment of Salary, PF, ESI, Protective Wears and One day Weekly Off (in synchronization with the data base application for capturing Staff Salary, PF and ESI payment details including verification and authentication from the banks and PF, ESI organizations)
f) Worker and Supervisor Absenteeism(in synchronization with Android based application for employee attendance monitoring through Aadhaar linked biometric finger printing)

b. Automated software system to arrive at the penalties for service failures of the Service Providers as per the formula defined in GO Ms. No. 279 dated 31.12.1015 of the department of MA&UD, Government of Andhra Pradesh.
c. Automated Payment Authorization System to enable the ULBs process the monthly payments to the Service Providers.

1.2.2.2. RTMS Modules and Required Features:

For further clarification, the expected RTMS project modules and descriptions of the features of the modules are given in the Annexure -1.

1.2.2.3. Required Technologies and Specifications for building RTMS Solutions :

While arriving at suitable technology stack, the solution provider is expected to suggest suitable technologies and specifications in consultation with the office of the CDMA and keeping into account current and future requirements of the project, licensing terms and procurement costs of all software and hardware components, tools, technologies etc., To ensure the quality aspects of the development process, the successful vendor will be required to implement STQC certification requirements and get the application software STQC certified within six months of the

1.2.2.4. RTMS –Hosting:

The RTMS is required to be cloud hosted and the cloud hosting facilities will be provided by APMDP at their cost. However, the RTMS vendor is required to interface with the cloud services provider for any regular requirements related to the hosting responsibilities.

1.2.2.5. Stakeholders for RTMS

- ULBs
- Service Providers (Solid waste management Package Operators)
- Office of DMA and Government of AP
- Citizen

1.2.2.6. RTMS Application Development Time Frame

End-to end design and launching of the solution should be completed within one calendar month from the date of the issue of the work order.

1.2.2.7. RTMS Deliverables

- POCI Time plan
- Detailed Project Plan for implementation of the development & implementation.
- Solution Architecture Documentation (screen shots)
- Identification of Technology Components for the scope of the Project
- Price Estimates
- Milestones and Deliverables
- Design Documents
- Pilot Implementation and Scale up plan
- Technical Support for Implementation and Maintenance
- User Manual Document – Soft Copies
- Standard Operating procedures (SOPs - Online and offline)

1.2.2.8. Deliverable Component- 1B: Providing Hardware for Call Center Operations in the Command and Control Center

The software application solution is planned to be installed in the cloud server, provided by CDMA and operated from the CCC set up in the IGC at Velagapudi, AP. In this context, the Solution Provider is also expected to set up a Call Center with the entire necessary hardware infrastructure in the CCC that is suitable to run the application software. The envisaged hardware is detailed in Annexure -1 of this RFP.

1.2.3. OPEX based Deliverables

1.2.3.1. Deliverable Component 2: Operations and Maintenance of the Call Center

Being the developer of the customized software application, the solution provider is also expected to undertake comprehensive operations and maintenance of the Call Center with the following responsibilities.

Ongoing Operations and Maintenance of the Software Application for the entire project period as per the service agreement. Major Responsibilities will include:

- Error tracking and debugging
- Adding new reports and Dashboards
- Code rewriting for better performance
- Version upgrades
- Version enhancements
- Comprehensive user support
- Technical troubleshooting
- Performance monitoring
- Performance testing

- Quality assurance testing
- Documentation development and maintenance
- Any other activities as deemed fit by the software application vendor.

The service vendor is expected to engage suitable number of software engineers / professionals to carry out the above listed responsibilities as per the committed service level agreement (SLAs)

Real-Time Monitoring of Municipal Services (RTMS)- Package -1
Annexure -1 : RTMS Modules and Required Features - Component -1
Software Application Requirements

RTMS Module	Functional Requirements	Required Solution	Deliverables from System Integrator
(1)	**(2)**	**(3)**	**(4)**
1.1.1. Integrated Software Application Modules for Real -time Field Monitoring of Municipal Services (RTMS) 1. A cloud based software applications platform for integrating inputs from indicated IOT & ICT devices and delivering outputs of: • Data base creation, Analytical tools, Dash boards, Alerts and user required MIS reporting. **Deliverables** 1. Delivering a Proof of Concept of integrated software solution showcasing the features, capabilities and functionalities as given Functional Requirements column (2). 2. Delivering a fine tuned Integrated Software platform covering all the aspects as shown at the proof of concept stage. 3. Required licenses for all software used in the provided solutions and indemnifying the client from any procurement obligations. 4. Deploying all the required high available hardware (server, networking elements with firewall for security) locally at the command center for application & archiving the data. **5.** Undertaking the operations & maintenance of software, associated hardware and upgrading the application as per the client requirement.			
i. Black Spots Management as per the requirements specified by the department	• Identification of Black Spots (Frequently occurring service failures / unsanitary conditions / waste dumps / breakages in basic services – road, water, drain etc.) • Mobile/ Hand held Devices based guidance tool for the service delivery staff for clearing the black spots	**1.** A cloud based software application operable on mobile / Hand held Devices for delivering the functional utilities as described in the previous column	1. Developing and Commissioning the suitable software Application which can become functional in the mobile / hand held devices of the identified staff 2. Delivering a Proof of Concept solution showcasing the features, capabilities and functionalities for delivering the results as shown in the

	• Programmatic feature in the software application to enable the command and communication center staff also to locate, pin point / mark the black spots and pushing them into the black spot database. • Dashboard /Analytical data inputs for identification of root causes and undertaking remedial actions and continuous improvement.		Functional Requirements column 3. Deploying required vehicle mounted / stationery video cameras / handheld devices for capturing the pictures / videos of black spots on a continual basis. 4. Training of staff in the identification, remediation and continuous improvement processes.
ii. Capture and Transmission of real time video streams & snapshots up to the MA&UD Command and Communication Center (CCC)	• Providing live video inputs in sync with Video Wall hardware connectivity requirements for monitoring the implementation of the Municipal services as specified by the client. • Video & snapshot coverage should include all the grievance types covered in the Public Grievance Redressal (PGR) module • Analyzing the efficiency of municipal staff/contractor/workers in attending to black spots, emergency priority issues.	1. Capture & live streaming of situations of municipal services through vehicle mounted video and photography instruments. 2. Transmission of video stream & snapshot for viewing & storage in MA&UD command center. 3. Complaint registration of service failures in PGR application. 4. Providing analytical dashboard and other reports as per client requirement. 5. Archiving of all the video & snapshot imagery data as per the storage & retention policy defined by the client.	1. Deploying trained manpower along with vehicles, video capturing instruments to execute the solution modules. 2. Customized software Application development for : • Video stream with time , geo stampings • Snapshots with time, geo stamp • Transmission of video streams, snapshots over secured IP network. 3. Analytical dashboard and other reports as specified by the client from time to time (issues covering all service delivery matters including priority, emergency and black spot issues.) 4. Solution for Archiving and Retrieving of the video & snapshot data.

			5. Providing Versions/Releases of software and maintenance of connected hardware in the solution provided by the system integrator.
iii. Uninterrupted and seamless projection of video and snap shot pictures on the Video Walls	• In sync with the display technologies, installed in the video walls in CCC at the IGC, the video streaming should be of high impact and higher pixel count. • The visual clarity of frame-by-frame video / pictures should be higher clarity to enable the CCC operators assimilate within a short span of time data from multiple sources to create accurate, usable information. They need clear information to make informed decision on critical issues	1. Software application enabling High Quality video wall projections	1. Software Application
iv. Monitoring the movement of the service providers and assets within the service areas through **door to door coverage with RFID tags.**	• Monitoring the live positions of the specified staff/employees/ officials/material resources and recording their movement within the specified geophysical entity.	1. IOT Solution with the features: • Movement tracking with time stamping and creation of movement maps. • Deviations monitoring • Browser based Visual outputs with drilldown facility: o State map	1. Providing configured geo tagging devices to the required number staff/employees/contract staff /resources etc. 2. Providing suitable software solution including the following features : a) Creating digital maps of geographical entities as indicated in column (3) b) Creating a database for all

		○ Regional map ○ District map ○ ULB map ○ Package map ○ Ward map ○ Micro Pocket map • Browser based visuals should be accessible on Smart Phone, Laptop/Desktop;	geographical & geo physical entities and developing GIS, GPS and GPRS related applications. c) Capturing the movement of staff/employees/ officials/material resources/assets with time stampings in the allocated geographical territories. d) Identification of entities (individuals, vehicles, physical assets) with unique ids. e) The entities to be indicated with differentiated legends in visual outputs. f) Deviation monitoring and reporting as per client requirements. 3. Execute the above solutions integrating the software application & devices. 4. Performance & service coverage metrics for authorizing payments to package operators & other service providers. 5. Keeping the movement of records/maps for periods as specified by the client.

			6. Provide & implement solution in all the 110 ULBs as specified by the client.
v. **RFID card recognition and weighment data transfer** from specially configured weighment scales to the Application Server.	• Micro Pocket Level Weighment of wet, dry and hazardous waste. • Identification of Micro Pockets with RFID cards • Identification of Waste collection bins with suitable numbering/id.	1. Android App inbuilt in the weighing machine with the following functions: a) Identification of the Micro Pocket through RFID card b) Identification of waste category(Wet/ Dry/ Hazardous) c) Registering the weight of the waste d) Transferring data to the server 2. RFID based ID cards for each micro pocket	1. Providing required number of electronic weighment scales (one each for a cluster of 15 micro pockets attached to the transportation truck), with the following inbuilt functionalities a) RFID reader for identifying the micro pocket through the RFID card. b) Identification of waste category(Wet/ Dry/ Hazardous) c) Registering the weight of the waste d) Transferring data to the server 2. The weighment scale to be integrated with software application for reading the RFID card & transmitting the weighment data to the server linking with micro pocket id. 3. Providing required number of RFID cards with unique identification for each micro pocket, for the number of micro pockets as specified by the client. 4. Affixing id numbers for bins to identify the micro pocket, for the number

			of micro pockets as specified by the client. 5. Providing the weighment solution integrating all above features.
vi. **Vehicle tracking o**f solid waste secondary transportation trucks, vehicle compactors and other specified vehicles	• Monitoring of the vehicle movement to check, if o The vehicle has covered allotted route and micro pocket collection points o The vehicle has maintained the prescribed time schedule for collecting & transporting waste. o vehicle has stayed for longer duration at the same place, o if a replacement vehicle has arrived as per the SLA in case of vehicle breakdown • Generating alerts to the concern as well as system alert to indicate service failure • Repair or Replacement vehicle provision – efficiency measure • Android app enabled with GPS based Tracking • Distance covered Vs Planned	1. Vehicle Tracking solution	Outputs & Reports: a) Provide solution for vehicle monitoring with all parameters(route covered, distance, time taken, excessive stop period, etc) b) Time delays and deviations in covering allocated micro pocket collection points c) Vehicle breakdown analysis

vii. **Integration with Public Grievance Redressal (PGR)- *'Puraseva'* Application** of the department of MA&UD.	• Developing a provision in the live video streaming module as above, to trigger complaints on service failures in the PGR module. • Maintaining an automated log of complaints lodged into PGR system. • Obtaining inputs from PGR system for building performance metrics to evaluate the efficiency and quality of grievance redressal by the package operators/service providers and municipal staff.	1. Software Application for integration with PGR module.	1. Develop and execute the software module for: a) Creating an integration module with PGR for video streams, snapshots and dashboard for displaying the logged calls metrics. b) Performance metrics for authorizing payments to package operators & other vendors. c) Analysis of grievance redressal cycle with reference to the frequency of occurrence, location, service provider, quality, timeliness of redressal and other functional parameters.(to assess the delivery efficiency of the service operator)
iii. E**mployee attendance monitoring through Aadhaar linked biometric finger printing**	• Capturing attendance of worker/ staff/employees/ officials (in & out of the workplace with time stampings) linked to Aadhaar. • Providing Automated Fingerprint Identification System (**AFIS**);	1. Creating an electronic attendance register for recording the staff/employees physical presence in the work place. 2. Providing analytical reports 3. Linking the attendance particulars to the contractor payment module as	1. Creating an electronic register with all employee details including biometric data i.e. finger print & facial scan for use in different applications within the scope of this RFP. 2. Provide an online registration system for capturing the details including biometric i.e., face& finger scan of all staff/employees and other physical data from all 110 ULBs in specified format. 3. Providing Automated Fingerprint Identification System (AFIS);

		required.	4. Keeping electronic records of attendance. 5. Periodical Attendance analysis reports and alerts as specified by the client. 6. Attendance Inputs to the payment module calculations. 7. Archiving the data for periods specified by the client.
ix. Capturing Staff Salary, PF and ESI payment details including verification and authentication from the banks and PF, ESI organizations	1. Monthly verification to check if the Operator had made timely and correct payment to the workers through: 1.1. Bank acknowledged payroll payment receipts with individual payment particulars for salary payment. 1.2. E-challan receipts from PF &ESI acknowledging payment PF, ESI subscriptions.	1. Payment monitoring App to check if regular payment of salary, PF, ESI subscriptions were made on monthly basis.	1. Development of a software module to arrive at the performance metrics for the operator for regular salary payment, PF, ESI subscriptions payment on monthly basis. This will be linked to payment authorization module.
x. Performance score card of the service providers including the ULB staff , including the penalties to be levied on the	The application shall be able to draw inputs from the respective modules and build a Score card board along with the penalties to be levied with substantive back up and evidentiary data of service failures.	1. Application software that will automatically arrive at the Performance Score of the Work Package Operator	1. System for building monthly Performance Score Cards for each of the Work package to measure the performance efficiency of the Solid Waste Management Service providers (Residential, Commercial and Mechanical Road Sweeping Work packages) for the following parameters. This activity should be in

service provider			accordance to the KPIs based performance measurement system specified in GO Ms. No. 279 dated 31.12.1015 of the department of MA&UD, Government of Andhra Pradesh
xi. Automated **Payment Authorization System** to enable the ULBs process the monthly payments to the Service Providers.	• Developing application software for Payment calculation based on KPI Scores and as per GO 279 Guidelines	1. Developing application software for Payment calculation based on KPI Scores and as per GO 279 Guidelines	1. Developing application software for Payment calculation based on KPI Scores and as per GO 279 Guidelines

1.1.2. Building Analytics based Dashboards and MIS Reports

Drawing inputs from the field monitoring modules as detailed above, the System Integrator is required to deliver analytics based Real-time Performance Dashboards and Regular MIS Reports. The types of information, frequency and the structure of the Dashboards and MIS reports should be in accordance with the client requirements which will be dynamic, interactive and query based. Indicative topics to be covered for building Dashboards and MIS reports are given in the table below, which need further discussion with the department before finalization. However, the built system should be flexible and dynamic enough to add / delete issues for this purpose.

Municipal Services and Black Spots Management	Sanitation and Solid Waste Management
Municipal Services 1. Numbers, types and frequency of service failures / complaints 2. Grievance redressal – timeliness and quality of redressal 3. Drill down with reference to Service Providers, ULB, Location, Staff	**1. Daily Micro Pocket Trip Report** MP No. Trip wise time in & Time out; Waste collected in each trip – Dry, Wet, Hazardous Citizen Feedback Worker Performance Score

Black Spots Management 1. Numbers, types and frequency ofBlack Spots Occurrence 2. Black Spots Removal – Timeliness and Quality of Removal 3. Drill down with reference to Service Providers, ULB, Location, Staff 4. Citizen Feedback Analysis	Worker Performance (All Services) Wearing of Protective Wear Usage of Proper Tools and Implements Complaints Management (citizen complaint & Inspection vehicle complaint) Complaints Received , Repeat Occurrence Resolving – Quality and Time. **Daily Transportation Report (Package Wise)** **Residential Package** Micro pocket wise Waste collected and Transported Failure in MP collection points coverage Dump yard / Receiving Points Complaints Worker complaints Citizen complaints Inspection complaints Vehicle breakdown Monitoring Hardware Failures **Commercial Package** Zone wise Waste collected and Transported Failure in Zone collection points coverage Receiving Points Complaints Worker complaints Citizen complaints Inspection complaints Vehicle break downs Monitoring Hardware Failures **Mechanical Sweeper Package** Road wise Performance Report Start time & Point ; End time and Point Route Travelled; failures in service coverage Worker complaints–evidence based Citizen complaints –evidence based Inspection complaints including quality of service –evidence based

	Vehicle break downs (Reporting) Monitoring Hardware Failures (Reporting) **Complaints Redressal Report** No. of service failures Redressal (quality & time taken to redress) Citizen Satisfaction Report Employee Management Report Weekly Consolidated Report (package wise) Monthly Consolidated Report (package wise) Reports are web enabled and Permissions to the contractor and the ULB officials to view the performance dashboard Overall Performance Dashboard ULB Wise (package wise) District wise State Level

Real-Time Monitoring of Municipal Services (RTMS)- Package -1
Hardware Requirements for the Call Center - - Component -2

A) Supply, Installation and operations of the equipment and related software required for call centre operations

Hardware Requirements:

Item	DESCRIPTION	Specification
A1) EPBX System – 1 No	EPABX system for taking the Outbound dialling required keeping in mind the different process requirements that takes place in the Control Room. The systems should be able to handle the process requirements of the call centre.	IP Office ,IP License - 25 nos, PRI (30 Channel) - 1 128 party ad-hoc conference (64party per conference) Voicemail for all users, Voice mail - 4Port for all the users, Operator console-Should have Dual 10/100 Ethernet ports to support co-located PC, Should have OPUS Codec, G.711a/u, G.722, G.726A, G.729, G.729A, G.729AB,Backlit display – 3.5” diagonal, 3 rows by

		24 characters, in aid compatible handset – supporting TTD acoustic coupler, Recent Call Log with at least 100 entries
A2)Windows 2016 Server 64 BIT – 1 No	Server license for the	WIN 2016 server standard edition
A3)Telephony/CRM Server: Intel Xeon (Quad Core) E31200 or above 16GB 1TB HDD – 1 No	CRM server to handle the flow of the call process taking place from ULBS to the control centre	One * Intel® Xeon® E5-2623V4 (2.6GHz/4- Core/10MB) Processor Kit, 10MB (1 x 10 MB) L3 cache, Intel® C610 Series Chipset, 16 GB (2 x 8 GB) RAM, DIMMS scalable to at least upto 3 TB, Advanced ECC with multi-bit error protection and memory online spare mode,3X600GB 12G SAS 10K RPM 2.5"HD, RAID Controller with 2GB Write cache supports RAID 0/1/10/5/6, Redundant Power Supplies.
A4) Agent PC : Dual core, 2GB RAM, 100GB HDD, Windows / Ubunto – 8 Nos.	Agent PC to take the process by work flow with the ULBS	Dual core/Higher , 8GB RAM, 500GB HDD, No ODD,Monitors-18.5,Windows 2016
A5) USB Noise Cancellation Headset with 2 year warranty – 25 Nos	Agent Head set	***AGENT*** – Single Wire ***Earpiece*** with PTT (Push to Talk) Motorola Radio ... Side-bar PTT; TRUE ***noise*** reduction microphone for loud areas; Kevlar ... Two-wire hands ***free*** surveillance solution for undercover and public safety personnel.
Software Requirements:		
Item	**DESCRIPTION**	**Specification**
A6) MS SQL 2012 Std Edition 64 BIT – 1 No Licensed for three(3) years	MS SQL 2012 Std Edition 64 BIT	MS SQL 2012 Std Edition 64 BIT
A7) 1E1 PRI Gateway Matrix – 1 No Licensed for three(3) years	PRI gateway has to be provided PSPN for calling through the calling agents	30 channel 1:30

B) Services required for Call Centre operations and Maintenance with the following features

Item	DESCRIPTION	Specification
B1) Dialling Modes - Predictive, Progressive, Preview, Manual	Outbound dialling modes are required keeping in mind the different process requirements. These dialling modes are should be selectable by user and can be changed as per the process requirements.	Outbound process would adapt **Predictive mode** for optimum time utilization of the agent because in predictive mode Dialler dials number according to pacing. Like for 10 agents on 1.3 pacing dialler will 13 calls, so that agent IDLE time will be less and productivity will increase. Customer feedback process would adhere to **Progressive Mode** as that allows them to create quality log. B2B Process would prefer **Preview mode** as the agent need to read the client information as available before calling. **Manual Mode** is overriding all the above modes and allows user to dial calls randomly by inserting the calling number.
B2) ACD - Auto Call Distribution	Automatic Call Distributor (ACD) is a call management facility that manages calls (both Incoming & Outgoing) and routes them based on the number called and described logic / handling instructions with the following features: ➢ Call Detail Records ➢ Call Forward on Busy ➢ Call Forward on No Answer ➢ Call Forward Variable ➢ Call Monitoring ➢ Call Parking ➢ Call Queuing ➢ Call Recording ➢ Call Retrieval ➢ Call Routing (DID & ANI) ➢ Call Transfer ➢ Call Waiting ➢ Caller ID ➢ Caller ID on Call Waiting ➢ Call Conference ➢ Route by Caller ID	One of the rules is Region based routing; A call received from Region 1 and based on Code, the call shall be routed to an Agent knowing that region details. In outgoing, the calling data is defined in Regions (based on districts), and Agents knowing specific regional items shall be connected with calls in Predictive Mode with their respective region.

	➢ Direct Inward System Access ➢ Distinctive Ring ➢ Do Not Disturb ➢ Flexible Extension Logic ➢ Local and Remote Call Agents ➢ Talk Detection ➢ Three-way Calling ➢ Time and Date ➢ Trunking ➢ VoIP Gateways ➢ Voicemail: ➢ Voicemail to email ➢ Voicemail Groups ➢ Web Voicemail Interface ➢ Roaming Extensions ➢ Remote Call Pickup ➢ Remote Barring	
B3) Unlimited TL - Team Leader / Supervision	The management can create as many Supervisors as required. This function is usually limited in most of the Diallers, but software should offer the same without limitations. The Supervisor / Team Leader can monitor single or multiple processes based on rights as set in the User Rights table.	The processes are complex and the Head of supervisors (Ops Head) is required to monitor all the processes, where as his subordinates are limited to monitor individual team (size of 10-20 agents) live performances. There is no limit to define the number of supervisor or rights
B4) E-Mail & SMS Integration	Should be able to trigger template based SMS based or send a template based mail on customer / client email id on call disposition. The system also supports incoming mail integration if the same need to responded / addressed by the multi-skill Agents.	A Call Centre handling complaint booking over the phone shall send automated SMS & Email to the caller and complaint supervisor after the complaint is booked. This can carry the Complaint ID, standard resolution time and service conditions. These complaints can also be received on incoming mail, and they can be shown to available agent's screen in the dialler itself. This will help the agent to call the complainant to reconfirm the issue, log complaint and send a written response to the complainant. Similarly, API based Incoming SMS can also be integrated in the system that can be handled in the similar fashion.

B5) Campaign Management - Outbound / Inbound	The User can define the campaigns as Inbound / Outbound / Blended. The system allows you to create as many campaigns as required and define their nature separately. Agents and Supervisors are restricted by their rights defined in the system.	Should allow them to define each campaign individually and create users, restrict user rights, define incoming and outgoing channels / path and campaign generic functions. There could be a supervisor handling more than one campaign and similarly agents can be given right to login in multiple campaigns.
B6) CRMS - Online Agent Monitoring Caller ID Popup Quality Monitoring Tools, Unlimited Processes, MIS Reporting	The product should allow the users to manage remote online monitoring (real time), it generates instant Popup with customer information (fetches instantly from database), provides you quality tools to monitor the live performances including call in queue, agent AHT, call conversion / success ratio. Users can define unlimited processes as defined in earlier point. And the best feature is self-defined - Custom Report Designer that allows the user to meet the client's parameters in automated mode.	The management prefers to monitor the process from remote location as the call centre setups are spread-out in multiple cities. This helps t to keep the complete control from a central location. Should seamlessly popup the caller id on agent screen before the call starts ringing and fetches the data / old log of the caller. The feature / CLI can also be integrated in external software User Owned Application. Quality Monitoring helps Supervisor to keep a watch on Agents, and also on the call flow, call in queue, disposition summary (real-time) helps to see the process success and timely lead management and resource deployment. Dash board reports also should have access rights, ones defined, the client or the user can directly pull the desired reports and data from the system. This reduces the manual interference and Man-hours in creating lengthy reports.
B7)IVRS - Multi Process Time Conditions Voice Mail Call Forwarding Call Bargin	Interactive Voice Response System, the first level of interaction with caller that helps the call centre to identify the caller's objective and route them to right department. This also helps in reducing manpower and handling calls in after office hours. The IVRS can be defined and customized with each process / campaign, with time conditions and CLI based logics. The system also provides Integrated Voice Mail that allows the caller to leave a message in the absence of agents or if the caller is in hurry, and request a call back at later time. The system can forward the calls to an external number during the non-working- hours if the call is critical in nature with the following features:	As multiple processes are operated in a call centre, each process requires a customized IVRS with levels and options pertaining to the process. The IVRS can be defined with time-conditions based on working hour & shift timings. The inbuilt Voice Mail allows the user to leave a message in non-working hours to help the call centre reach the customer next morning. This message can also be sent to Supervisor email id as an attachment. If the nature of the call is critical, option can be made to forward the live call on a mobile or external landline for immediate assistance. Software should help the supervisor to listen to a live call, or intervene, or whisper to agent during the call.

	➢ Interactive Voice Response (IVR) • Multi Process • Time Conditions • Voice Mail • Call Forward • Call Barging	
B8) Recordings - 100% digital call recording	Should have inbuilt digital voice logger that records each conversation and saves in the server hard-disk in compressed format to occupy minimal space.	Call Recording is a mandate and most critical in process. Call Centre has to ensure 100% recording to satisfy the clients. Should insure 100% Digital Recording and allows the user to recover them easily. These recordings are utilized for quality monitoring, verification purposes and for further trainings in the organization.

Technical Executives Requirement for Software and Call Center Management		
Position	**Required Qualification**	**Required Experience**
1. Project Manager (1 no.)	• B. Tech/B.E. - Computers, Electrical or Electronics. • M. Tech., in Computer Sciences or Systems / information technology as Specialization in MBA desirable. •	8-12 years hands-on experience in Technical Projects 4-6 years' experience in Managing IT Projects **Technical Experience:** o Technical proficiency in MEAN Stack. o Experience on any one of MVC Framework, Zend, Code Igniter, Symfony etc o Experience on any one CMS. o Experience in Client side technologies, HTML, CSS, Java scripts, jQuery, Ajax, JSON, bootstrap. o Familiarity with Agile Scrum methodologies. **Project Management Experience:** o Defining project scope, schedule and objectives, involving all relevant stakeholders and ensure technical feasibility o Tracking changes to the project scope, project schedule and project costs using appropriate verification techniques o Developing detailed project plans to monitor and track progress o Measuring project performance using appropriate tools and techniques o Performing risk management to minimize project risks o Reporting and escalating risks to management as and when required

		o Guiding and helping the technical team with development issues o Creating and maintaining comprehensive project documentation o Ensuring resource availability and allocation o Ensuring flawless execution Industry: IT-Software / Software Services Role: Category: Customer Handling, Project Monitoring & Maintenance
2. Software Engineers (4 nos.)	• B.Tech/B.E. - Any Specialization, Computers, Electrical, Electronics / Telecommunication • M.Tech - Any Specialization, Computers, Electronics/Telecommunication, MCA - Computers, MS/M.Sc(Science) - Any Specialization	Minimum 4 - 5 years practical experience handling enterprise level applications **Technical Experience:** • Expertise in sound software engineering principles • Experience with and awareness of modern Web frameworks • Understanding of sound package management philosophies, including package management systems as NPM. • Knowledge of LAMP architecture using RPM-based operating systems, including the latest versions of Angular JS, Node JS, MySQL, and REL. • Understanding of system and infrastructure design • Practical experience in evaluating and deploying enterprise solutions, both off-the-shelf and custom built. • Experience with RESTful principles. • Working expertise in Git, including advanced Git workflow techniques • Ability to translate vague business requirements into concrete code, services, or recommendations • Exposure to software development methodologies, including Waterfall and Agile; experience in hybrid implementations a plus • Ability to multi-task and manage tasks with varying priorities, and influence what those priorities should be. • Excellent verbal and written communications skills • Willingness to partner with peers to solve problems together • Ability to understand new technologies quickly and implement

		them in abbreviated timeframes • Knowledge of common design patterns in web development; i.e. MVC, MVVM, etc • Comfort in working with a multi-discipline, geographically-dispersed team. • Expertise in information security best practices • Strong grasp of developer best practices with emphasis on practical resolutions to shared challenges Industry: IT-Software / Software Services Role: Category: Software Development, Testing & Debugging, Deployment.

2. SECTION -2: INSTRUCTIONS TO BIDDERS AND BIDDING PARAMEERS

2.1. The RFP document is available only in the e-procurement portal and proposals are to be submitted online through the e-procurement portal only at the following URL. https://tender.apeprocurement.gov.in/login.html

2.2. QUALIFICATION CRITERIA

The invitation is open to vendors who qualify the eligibility criteria as given below. The Bidder/Vendor may be a single entity or a consortium of members not exceeding two, one being a primary/lead member. If the Bidder is a consortium, a Letter of Association specifying the roles and responsibilities of each member with an undertaking that both the members are jointly and severally responsible in the discharge of the obligations and compliance with the terms and conditions of the RFP and the Contract. In case of consortium, the eligibility criteria may be satisfied by either of the members.

#	Qualification Criteria	Supporting Documents
1.	Registered entities such as sole proprietorship / partnership firms, companies registered under Indian Companies Act 1956 / 2013and should be operating in India for the past five years. Not more than two members of the above categories can form a consortium among themselves for participation in this RFP.	• Sole Proprietorship – To prove the legal existence of the sole proprietorship, any of the documents such as CA Certification, MSME Registration, Shop Act License or Bank Current Account Passbook in the name of the business entity. • Partnership Firm: Certificate of Registration from Registrar of Firms of the Area in which business is located • Private / Public Ltd. Companies: Copies of Certificate of Incorporation and Certificate of Commencement of business in case of Public Limited Company or Certificate of incorporation in case of Private Limited Company, issued by the Registrar of Companies • In case of a JV/Consortium: Legally valid agreement between the JV / Consortium members to be provided along with the Power of Attorney authorizing the lead member to submit the Proposal as specified in the Forms

#	Qualification Criteria	Supporting Documents
2.	Statutory Certifications	• PAN, and GST of all the entities that are participating in the RFP.
3.	The Bidder (Single Entity / Consortium as a whole) should be having an annual turn-over of minimum Rs. 7 (Seven) Crores in any one year during last five preceding financial years, i.e., 2012-13,2013-14, 2014-15, 2015-16 and 2016-17	• Copies of the audited balance sheets should be submitted along with Auditor's Certificate and Income Tax and Sales Tax Clearance Certificates
4.	Experience Criteria	Supporting Documents
5.	Bidder (Single Entity / Consortium as a whole) should have prior experience of implementing a minimum of 3 (three) similar assignments in any ULBs or Government departments. Proposals with less than 3 assignments of experience, will not qualify for evaluation.	• Copies of the Work orders and completion / Successful Execution certificates must be submitted
6.	The Bidder should comply with registration with all the relevant Statutory Authorities.	• Submit PF registration, Goods and Service Tax registration, Latest Income Tax clearance Certificate and Labour Registration.
7.	EMD	• The Bidder has to deposit **Rs.5,00,000/- (in words: Five Lakhs**) a**s the EMD** through Net-banking / RTGS / NEFT from the Bidder's registered bank account only in favour of the entity as indicated in the e-procurement portal. (will be refunded to the unsuccessful Bidder after the completion of Proposal Selection Process)

2.3. PRE-QUALIFICATION CRITERIA

2.3.1. Bidder should note that this is a critical project with pre-specified time-lines. Bidder must comply with all sections. The aspiring Bidder should submit their Proposals in compliance with the Tender procedures and Contract terms as prescribed in the following sections of the Tender Document.

2.3.2. The Bidder should not have been barred or black-listed by any of the departments/organizations/PSUs of the central/state govt. on the date of Proposal submission. A self-declaration certificate from the authorized signatory should be submitted by the Bidder.

2.3.3. The Bidder should give clause-by-clause compliance for the technical specification of the solution as in the tender in their technical Proposals. Also, give unconditional compliance of all the terms & conditions as mentioned in the Tender document.

2.3.4. Bidder shall carefully examine the scope of work and specifications and fully inform themselves as to the conditions and matters, which may in any way affect the work or the cost thereof. Should a Bidder find discrepancies or omissions in the documents or should he be in doubt as to their meaning it should notify the Department in writing not later than one week or present his request in written form during the pre-Proposal meeting.

2.4.EARNEST MONEY DEPOSIT (EMD)

2.4.1. The EMD shall be deposited as indicated in the Proposal Schedule on e-procurement platform through Net-banking / RTGS / NEFT from the Bidder's registered bank account only in favour of the entity as indicated in the e-procurement portal. The EMD will be refunded to the unsuccessful Bidder after the completion of Proposal Selection Process.

2.4.2. Earnest Money is liable to be forfeited and Proposal is liable to be rejected, (a) if the Bidder withdraws its proposal during the period of proposal validity; (b) if successful Bidder refuses of neglects to contract negotiation initiated by the authority; (c) to execute the contact; (d) fails to furnish PBG within the time; (e) engages in a code of fraudulent practice, coercive practice and (f) Miss representation/suppression of facts.

2.4.3. The earnest money of all the unsuccessful Bidder(s) will be returned after acceptance of purchase order and signing of agreement with by the selected Bidder(s). The Earnest Money of successful Bidder(s) shall be returned after furnishing of Performance Security or can be adjusted towards the performance Guarantee. No interest will be payable on the Earnest Money Deposit.

2.5.PERFORMANCE GUARANTEE

2.5.1. **Performance Guarantee (PBG)**

a. A PBG of value indicated in the Bid Data Sheet would be furnished by the bidder in the form of a Bank Guarantee as per the standard format provided in the Attachment from any Indian Schedule Bank.
b. The PBG should be furnished within 15 working days from the Award Notification and should be valid for entire term of the contract.
c. The Performance Bank Guarantee Should be valid for the entire contract period and additional 3 Months(90 days) i.e. claim period beyond expiration of contract period
d. The performance guarantee shall be returned to the Bidder within 30 days of the date of successful discharge of all contractual obligations at the end of the period of the agreement
e. In the event of any amendments to agreement, the bidder shall within 15 days of receipt of such amendment furnish the amendment to the performance guarantee as required.

2.5.2. **Forfeiture of Performance Bank Guarantee**

The performance bank guarantee of the Successful Bidder shall be forfeited under the following conditions:

a. If the Bidder fails to Perform its Obligations stipulated in the Contract
b. If the Bidder fails perform a proper exit and transition
c. If the Bidder violates any other terms and conditions of the Contract.
d. If the Bidder indulges in any such activities as would jeopardize the interest of the APMDP /DMA in timely finalization of this RFP document.

The decision of the CDMA regarding forfeiture of PBG shall be final and not be called upon question under any circumstances by the Bidder.

2.6. **PRE-PROPOSAL (BID) MEETING**

2.6.1. The date, time and venue of the Pre-Proposal Meeting shall be: as indicated in the Proposal Schedule. Bidder shall carefully examine the scope of work and specifications and fully inform themselves as to the conditions and matters, which may in any way affect the work or the cost thereof. Should a Bidder find discrepancies or omissions in the documents or should he be in doubt as to their meaning it should notify the Department in writing not later than one week or present his request in written form during the pre-proposal meeting.

2.6.2. During the course of Pre-Proposal Meeting, the Bidder will be free to seek clarifications and make requests for consideration of the APMDP. They may also send their queries by E-mail. The APMDP shall endeavor to provide clarifications and such further information as it may consider appropriate for facilitating a fair, transparent and competitive Proposal selection Process.

2.6.3. The APMDP will consolidate all the written queries sent by e-mail and any further queries raised during the Pre-Proposal meeting. Replies to all the queries shall be published as Corrigendum in the e-procurement portal. The clarifications of the APMDP to the Bidder queries and the amendment / Corrigendum furnished in the e-procurement portal shall become part and parcel of this RFP and the same shall be binding on the Bidder.

2.6.4. Non receipt of reply to the queries raised by the Bidder shall not be acceptable as a valid reason for non-submission of the Proposal. It should be noted that non-reply to any query or queries shall not mean that the version of the Bidder as reflected in the query or queries has been accepted by the APMDP. The conditions given in the original RFP document are valid to be good for Proposal submission unless modified or clarified by any Corrigendum subsequently, till the final date of Proposal submission.

2.7. PROPOSAL SUBMISSION: TECHNICAL PART

2.7.1. The Technical part of the proposal should be uploaded in the e-procurement portal (in pdf format) only and should consist of the asked for details and supportive documents in forms T1 to T10, the formats of which are given as attachments to this RFP. In case the procedure of tender processing is revised, the same shall be communicated by way of Corrigendum and Addendum through the e-procurement website. Bidder should visit the said website on day to day basis till the last date of Proposal submission.

2.7.2. Technical Proposal on the Solution offered and implementation methodology should be furnished by the vendor. At the **Go Live** stage, the project is required to be implemented simultaneously in all the 110 ULBs. The Bidder is required to undertake a study to have a complete understanding of the manner in which the municipal services are being provided with a special focus on handling of Sanitation and Solid Waste Management Services and Black Spots Monitoring. The Approach and Methodology shall contain details including a) Implementation and Handholding support to the ULBs and b) Risks and Mitigation Plans. These details shall be furnished in the Technical Response Form given as Attachment T5 to this RFP. In addition, the Bidder is required to provide detailed information on any other important aspects which are critical to the long term project success.

2.7.3. Bidder to clearly spell out in his offer any deviations to the Technical and Commercial Requirements as specified in this RFP in its entirety. In the absence of any deviations brought out in the offer explicitly, it will be construed that Bidder complies comprehensively with all the Requirements.

2.7.4. While submitting the technical proposal, the Bidder shall ensure that they have understood the scope of the work detailed in Section 3, in its entirety. The details asked for in the Forms and descriptions given throughout this RFP should be read together The Bidder should give clause-by-clause compliance for the technical specification in their technical Proposals. They should also give compliance of all the terms & conditions as mentioned in the proposal document. Conditional Proposals / partial compliance

shall not be accepted on any ground and shall be rejected straight away.

2.7.5. Of the above detailed, no document should be left unfilled; otherwise the RFP filing will not be valid and the incomplete RFP response will not be considered for any evaluation. All the pages of the documents should be signed by the authorized signatory of the Bidder and the scanned copies of the documents should be uploaded in the e-procurement portal.

Technical Proposal Forms – Attachment Forms T1 to T7

(a) Attachment Form T1: Covering letter completed and signed by a person or persons duly authorized
(b) Attachment Form T2: Details of the Proposer
(c) Attachment Form T3 : Anti-Collusion Certificate
(d) Attachment Form T4: Proof of Eligibility certificate
(e) Attachment Form T5Consortium Agreement
(f) Attachment Form T6 Power of Attorney
(g) Attachment T7: Approach and the Methodology for providing all the indicated services
    i. Software Application - Solution Framework and Architecture (scalability, process flow management, Data Analytics, Dashboards for daily operations management and Dashboards for Strategic Decisions)
    ii. Implementation Activities at the Command and Communication Center
        a) Software Application Administration
        b) Call Center – Operations and Maintenance
        c) Staff Management
    iii. Implementation and handholding the ULBs and the Solid Waste Management Service providers for diligent adoption of RTMS System
    iv. Envisaged Risks in Application Implementation and Mitigation Plans
    v. Data Security Risks -Identification and Mitigation Plan - Interface with the Cloud Services Vendor
    vi. Exit Plan – To enable the department develop contingency plans
    vii. Availability of SOPs Online and Offline (Adequacy and Quality)
    viii. Managerial and Technical Staff Deployment for Onsite (at Command and Communication Center) Project Monitoring and Troubleshooting – No. of Staff planned to be deployed, their qualification, experience and suitability for the responsibilities
    ix. Detailed specifications of the hardware proposed.

2.8. PROPOSAL SUBMISSION: FINANCIAL PART

2.8.1. The Financial Proposal should be submitted in the Attachment Form – F1: Financial Offer for the Project given for the purpose. Proposals would be evaluated for entire Schedule of the work. Bidder should offer prices for all the items of Schedule and all the services to be provided by the Bidder as per the scope of work. The Proposal amount for the project shall be indicated as given in the form, clearly indicating in figures and words in INR, and signed by the Bidder's authorized signatory. In the event of any difference between the figures indicated in the Form F1 and the e-procurement portal, the amount indicated in the e-procurement portal shall be taken into account. The quoted Proposal amount shall be **exclusive** of all duties, taxes and other levies payable to the Bidder as per State / Central Government rules. However, the Bidder shall specify the rates of all applicable taxes and levies.

2.8.2. While submitting the Financial Proposal, the vendor is required to take into consideration the Project implementation obligations in its entirety.

i. The Implementation scope should encompass the implementation of the Software Application Solution by obtaining seamless information from all the 110 ULBs and the Solid Waste Management Service Providers (Work Package Operators). In the first phase it is estimated that there will approximately 140 outsourced Solid Waste Management Work Packages, which are likely to increase over a period of time. At the same time, in each ULB, there is one work package which is operated by the ULB itself. Thereby the RTMS vendor will be required to simultaneously monitor the operations in about 200 work packages in which about 34,000 workers will be engaged. Currently, an approximate number of about 13,000 micro pockets have been arrived at in which Sanitation and Solid Waste Management Services are planned and the Bidder’s Application Solution is required to concurrently monitor the services in all these micro pockets on all the 365 days of the year. The Bidder can assume a maximum of 5% increase in the number of ULBs and a maximum of 15% increase in the total number of Work Packages across all ULBs. The Price quoted should absorb this variation during the currency of the Contract. In the event of increase in number of Work Packages / Micro Pockets, the additional Price will be determined on mutual discussions based on the prevailing situation at that time.

ii. The Price should also consider any modifications that may be required from time to time due to changes in the monitoring or output (dashboard, analytical and MIS reports) However, such changes need to be incorporated based on the need of the department. In case of any improvements that are likely to be incorporated by the Bidder on his own due to change in the Technology, the same can be incorporated on quarterly basis. In both the cases, APMDP will not allow any Price variation during the currency of the Contract.

iii. In case Bidder would like to undertake awareness creation on the filed level activities on data capturing and uploading the information to the Application Server, or on the contractor payment mechanism, it is the responsibility of the Bidder and the price should be included in the financial proposal.

iv. Director, Municipal Administration will be the Single Point of Contact for the Bidder (SPoC) during the currency of the Contract; be it for payments or for addressing any contractual issues. The Contractor should bring to the notice of Director, Municipal Administration (DMA) any issues that need to be resolved with any ULBs.

2.9. PROPOSAL DUE DATE

The proposal submission date of both technical and financial parts is as indicated in the Schedule of the Proposal (Table-1). The APMDP may, in exceptional circumstances, and at its sole discretion, extend the above due date and intimate as Corrigendum in the e-procurement portal.

2.10. PROPOSAL SUBMISSION METHOD

Proposal should be submitted in the e-procurement portal only as soft copies in support of their Technical Proposals in the formats as detailed in this RFP. Proposal submitted as handwritten or printed copies or by e-mail, or any other transmission will not be accepted. The Bidder shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness / authenticity. After uploading the Technical / Price Proposal, the originals of the uploaded statement, certificates, documents, (except the Price Proposal / offer) are to be submitted by the Bidder to the APMDP at the time of technical Proposal opening or before the date of Technical evaluation by the Selection Committee. Failure to furnish originals of any of the uploaded documents, certificates, before the said dates as above, will entail rejection of the Proposal and forfeiture of EMD. Similarly, if any of the certificates, documents, etc., furnished by the Bidder is found to be false / fabricated / bogus, the Bidder will be blacklisted and the EMD forfeited. The APMDP will not hold any risk and responsibility for the loss in transit during uploading of the scanned document, for the invisibility of the

scanned document online, and any other problem(s) encountered by the Bidder while submitting his Proposals online.

2.11. PROPOSAL VALIDITY

Both the Technical and Financial Proposals submitted by the Bidder shall be valid for a period of 90 (ninety) days from the Proposal Due Date. During the above mentioned period no plea by the Bidder for any sort of modification of the RFP based upon or arising out of any misunderstanding of misconceptions or mistake or for any other reason will be entertained. In exceptional circumstances, prior to expiry of the original time limit, the RFP Inviting Officer may request the Bidder to extend the period of validity for a specified additional period. Such request to the Bidder shall be made in writing. A Bidder may refuse the request without forfeiting his E.M.D. A Bidder agreeing to the request will not be permitted to modify his RFP, but will be required to extend the validity of his E.M.D. for a period of the extension.

2.12. PROPOSAL REJECTION

2.12.1. APMDP reserves the right to reject the proposals which are incomplete and / or received after the due date.

2.12.2. APMDP shall not be responsible for non-receipt of proposals by the specified date and time for any reason, including postal holidays or delays.

2.12.3. APMDP reserves the right to accept or reject any proposal in full or part, and to suspend this process and reject all quotations or part at any time prior to the award of Contract, without thereby incurring any liability to the affected Vendors on the grounds of the Purchaser's inaction.

2.12.4. APMDP reserves the right to reject the proposals if it finds that any unfair business practices being resorted to by the Bidder.

2.12.5. Any attempt of negotiation direct or indirect on the part of the Bidder with the authority to whom it has submitted the proposal or authority who is competent finally to accept it after it has been submitted, or any endeavor to secure any interest for an actual or prospective Bidder or to influence by any means the acceptance of a particular proposal will render the proposal liable for rejection from consideration. The decision of PD, APMDP, in this regard will be final & conclusive and no queries/communication will be entertained in this regard.

3. SECTION -3: PROPOSAL SELECTION AND PAYMENT PARAMETERS

3.1. PROPOSAL OPENING

PD, APMDP / DMA / Authorized person by PD, APMDP will open all the Technical Proposals submitted online, immediately after the closing time, and list them for further evaluation. The proposal opening will be done in the presence of Bidder's representatives who choose to attend the Technical Proposal opening as per the RFP schedule. **Bidder shall ensure that the representative carries a valid photo ID and authorization letter from the Bidder.** The Bidder's representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Proposal opening being declared a holiday for DMAs Office, the Proposals shall be opened at the appointed time and location on the next working day.

3.2. PRELIMINARY SCRUTINY

The Pre-qualification Proposal documentation shall be evaluated in two sub-steps. Firstly, the documentation furnished by the Bidder shall be examined prima facie to see if the technical skill base and financial capacity and other Bidder attributes claimed therein are consistent with the needs of this project. The evaluation committee will evaluate and compare all technical Proposals to determine if they are substantially responsive and meeting all the requirements of the RFP.APMDP will prepare a list of firms based on the compliance to all the terms and conditions of the RFP. The Proposals that do not conform to the RFP conditions and Proposals without adequate capabilities as per RFP requirements and Minimum Eligibility Criteria stipulated in the RFP Document shall be straightaway rejected. All eligible tenders will be considered for further evaluation. The decision of PD, APMDP / DMA will be final in this regard.

3.3. EVALUATION OF TECHNICAL PROPOSALS

The Technical Proposal will be examined by an Evaluation Committee, firstly on the basis of responses against the Pre-Qualification criteria and secondly based on the completeness of the Proposal documents, their authentication and responses to the scope of work, duly applying the evaluation criteria and the points system specified below. Proposals which do not comply with the Pre-Qualification criteria will be rejected and will not be considered for further evaluation. The Bidder, who scores a Technical score of more than 70%, will qualify for the evaluation of the commercial Proposal.

3.4. CRITERIA FOR TECHNICAL EVALUATION

The Bidder should note that the parameters given in the Table below are critical for the success of the project in consideration and all the mentioned parameters should be given due weightage and the proposal shall contain accurate and precise information.

3.5. TECHNICAL PRESENTATION

Bidder is required to make a live Proof of Concept (PoC) demonstration of the complete Application taking an election ward consisting of 5-6 micro pockets as the project area. As a functional user, APMDP is primarily interested in evaluating the Bidder's capability to develop the Software Application fulfilling all the requirements indicated in the Scope of Work. Therefore, the Bidder can demonstrate a PoC demonstration of the Application, primarily showing the data structure, dash boards, alerts and MIS. Such demonstrations shall be done at the cost of the Bidder, at the Command and Communication Center (CCC) in the IGC Velagapudi, Guntur. The date and time for such demonstrations will be communicated in advance. To develop the demonstration level Application, for required inputs and clarifications regarding the Application, Bidders are welcome to approach the office of the APMDP, over e-mail or telephonically as at the contact given below.

Sri A.L.Mal Reddy, Procurement Specialist,
MSU- APMDP, MG Inner Ring Road, Guntur.
e-mail: ps.apmdp@cdma.gov.inMobile: 9849453458

The demonstration / presentations, should evidence the following aspects so as to prove the capabilities of the Bidder to provide necessary services as per the Scope of Work.

- Demonstrate the solution in real life scenario
- Understand software solution's features in greater detail
- Understand software solution's fit to ULB's requirements
- Approach and Methodology
- Project plan
- Comprehensiveness of the Technical solution proposed in the technical Proposal

3.6. CLARIFICATION REQUIRED IN RESPONSE DOCUMENTS

3.6.1. During the process of evaluation of the Technical Proposals, APMDP reserves the right to seek any further information and clarifications from any or all the Bidders. The information and clarifications will be sought through email communications / request a personal visit of the authorized representatives of the Bidder there for. The Bidder is expected to provide the clarifications or additional information within the stipulated time

as indicated in the communication. If the Bidder fails to provide the clarification or additional information, the information provided in the technical proposal only will be used for evaluation. It is clearly understood that the additional information or clarification on the technical proposal provided by the Bidder will not be the basis for affecting any changes in the Commercial Proposal already submitted by the Bidder.

3.6.2. While verifying the qualification, experience and testimonial documents for their sufficiency and genuineness, APMDP reserves the right to obtain any clarifications in writing from the agencies / companies / organizations that provided such certifications. All the clarifications and verifications will be obtained before awarding the technical scores and any clarification or information provided by such agencies etc. beyond this date will not be accepted.

3.7. TCHNICAL PROPOSAL EVALUATION

3.7.1. The technical proposal will be evaluated as per the point system given in the table below.

Parameters for Technical Evaluation	Maximum Marks for the Parameter Group	Maximum Marks for Individual Parameter
1. **Number of Previous deployments of the Similar Applications / solutions – Application Development, Enhancement and Maintenance Projects** (Consortium as a whole)	**15**	
a. Three Government / Municipal Projects		10
b. Four and more Government / Municipal Projects		15
2. Performance of the Application in the PoC Pilot - with reference to -	**60**	
a. Error Free Coverage of all KPI Modules in the RTMS – Data Capture, Live Streaming and Real Time Dashboards (Service Coverage Monitoring, Secondary Transportation, Weighment Monitoring, Black Spot Management (Cleanliness) Grievances, Absenteeism and Contractor Payments)		35
b. Data base, and Analytical visual presentation of the Outputs – Dashboards, Alerts and MIS		15
c. Call Centre – Calls Handling, Communication with Field Staff		10
3. Risks (Data and Security) Identification and Mitigation Plan (Adequacy and Quality)	**10**	10

Application Implementation Risks Data Archiving - Security Risks		
4. Exit Plan -Adequacy and Quality	**5**	5
5. **Availability of SOPs Online and Offline**	**5**	5
6. Managerial and Technical Staff Deployment for Onsite (at Command and Communication Center) Project Monitoring and Troubleshooting – No. of Staff planned to be deployed, their qualification, experience and suitability for the responsibilities	**5**	5
Total	**100**	

3.7.2 Only those Bidders, who score a Technical score of more than70 % (Seventy), in the above evaluation, will qualify for the evaluation in the financial evaluation. The technically short listed Bidder will be informed of the date and venue of the opening of the commercial Proposals through email communication

3.8.FINANCIAL PROPOSAL OPENING AND EVALUATION PROCESS

3.8.1. The Financial Proposals will be opened and evaluated in the e-procurement portal on the communicated date and time and the financial scores will be arrived at through the automatic calculation mechanism in the e-procurement portal.

3.8.2. The formula for arriving at the Financial Scores (FS) is as given below.

- The Lowest Financial Proposal (FL) will be given a Financial Score (FS) of 100 Marks.
- The Financial Scores (FS) of other proposals will be computed as follows:
  FS = (FL ÷ F) X 100 *(F = amount of Financial Proposal quoted by the Bidder in the e-procurement portal and Form F1)*

3.9.COMBINED SCORE (CS)

For the purpose of selecting the Successful Bidder, a Combined Score (CS) of TS and FS would be arrived at for each Bidder by giving 70% weightage for TS and 30% weightage for FS as the selection is based on QCBS System.
CS = TS X **0.7 + FS** X **0.3***(A weightage of 0.7 is given to the TS and 0.3 to the FS).*

3.10. SELECTION OF THE SUCCESSFUL BIDDER

The Proposal that has obtained the highest CS (1st rank) will be communicated to the Government, which after propose scrutiny of the selection process will notify Successful Proposal and the Successful Bidder will be given a Letter of Award (the 'LOA') that its Proposal has been accepted specifying the other terms and conditions for entering into the contract.

3.11. CONTRACT EXECUTION

Upon receipt of the LOA, the successful Bidder will be required to undertake the following:

3.11.1. Furnish a Performance Guarantee by way of an irrevocable Bank Guarantee, (BG) issued by a scheduled bank located in India in favour of Commissioner and Director Municipal Administration. The validity of BG shall be for the entire period as indicated below.

i. For the total agreed upon contact amount for the entire project period. (The agreed upon contract amount will be exclusive of all applicable statutory levies and taxes)

3.11.2. Execute the Service Agreement within ***two weeks*** of the issue of LOA or within such further time as the APMDP may specify in its discretion.

3.11.3. **Date of Application Go Live and the Maintenance Work Commencement:** The Application shall be required to be developed and commissioned at the dates mutually agreed upon between the CDMA and the successful Bidder.

a. Failure of the Successful Bidder to fulfill the above requirements (Cl 3.11.1 and 3.11.2) and commence the project within the given time shall lead to the annulment of the LOA, and forfeiture of the EMD deposited during Proposal submission. The Director Municipal Administration shall be the final authority to take appropriate actions thereupon.

b. Notwithstanding anything contained in this RFP, the APMDP reserves the right to reject any proposal, or to annul the Proposal selection process, at any time without any liability or obligation for such rejection or annulment, and without assigning any reasons thereof. However, if any Bidder is found to have engaged in any of the following activities, his / her proposal will be summarily rejected at any stage

i. Made material misrepresentation; or
ii. Has not respond promptly and diligently to requests for supplemental information; or
iii. Brought in any pressure or influence on any officers or employees of the APMDP or the Government for favouring the Proposal.

3.12. PAYMENT FOR THE SERVICE:

3.12.1. The payment structure envisaged for the services for the CAPEX and OPEX operations is as given in the table below.

3.12.2. Payments will be made to the service vendor against invoices at the intervals mentioned above. Vendors shall ensure that the invoices issued for Payment shall comply with the following requirements:

- Invoice should be submitted to the appointed nodal officer who will be single point contact (SPOC) for the service vendor for the entire project period. The invoices shall be processed upon obtaining the satisfactory work completion authorization of the nodal officer
- Invoice should be serially numbered, duly signed (if the invoice is Computer system generated, and then it should specifically mention that "The Invoice is computer generated and requires no signature").
- Invoice should contain LoA / Contract/PO (Purchase Order) reference number.
- Invoice should contain the Name, Address; PAN Number and Goods and Service Tax Registration No.
- Invoice should contain the Name and Address of the recipient.
- The amount in figures should match the amount in words.
- 10% Mobilization advance will be given against submission of P.BG and will be verified fill the entire advance amount recovered.

<table>
<tr><th colspan="3">Table : Payment Conditions</th></tr>
<tr><th>A. CAPEX Responsibilities</th><th>Financial Quotation</th><th>Payment Conditions</th></tr>
<tr><th>(1)</th><th>(2)</th><th>(3)</th></tr>
<tr><td>1. Software Application Development, Installation, Commissioning and Go Live.

2. Call Centre Hardware - Supply, and Installation and Service required for Call Center (Refer Annexure -1 for Requirements)</td><td rowspan="3">The Bidder is required to quote one lump sum amount for all the CAPEX and OPEX activities for the entire project period of three years. The price quote should be inclusive of all the personnel and service costs incurred towards Software Application Development, Call Centre Hardware - Supply, and Installation O&M of Software Application, any License Renewal and all such associated costs</td><td rowspan="3">The agreed upon amount in the service contract for all the three years for all the activities against both the CAPEX and OPEX responsibilities will be paid in 36 equated monthly instalments.

The net amount payable will be after deducting applicable penalties for service failures

The applicable GST will be paid additionally as per the applicable rates on each of the monthly instalment</td></tr>
<tr><td>B. OPEX Responsibilities</td></tr>
<tr><td>3. Software Application Operations and Maintenance (O&M) - Activities such as

• Error tracking and debugging
• Adding new reports and Dashboards
• Code rewriting for better performance
• Version upgrades
• Version enhancements
• Comprehensive user support
• Technical troubleshooting
• Performance monitoring
• Performance testing
• Quality assurance testing
• Documentation development and maintenance

4. Call Centre Operations -

Maintenance of Hardware and Call Centre Operations</td></tr>
</table>

3.13. **SERVICE LEVEL AGREEEMNT AND** PERFORMANCE MONITORING

3.13.1.1.1. "Scheduled Maintenance Time" shall mean the time that the System is not in service due to a scheduled activity as defined in this SLA. The scheduled maintenance time would not be during 16X6 timeframe. Further, scheduled maintenance time is planned downtime with the prior permission of DMA.

3.13.1.1.2. "Scheduled operation time" means the scheduled operating hours of the System for the month. All scheduled maintenance time on the system would be deducted from the total operation time for the month to give the scheduled operation time. The total operation time for the systems and applications within the Command and communication Center will be 16X6X365. The total operation time for the service provider's site systems shall be 18 hours.

3.13.1.1.3. "System or Application downtime" means accumulated time during which the System is totally inoperable within the Scheduled Operation Time but outside the scheduled maintenance time and measured from the time the DMA and or its employees log a call with the Solution Provider team of the failure or the failure is known to the Solution Provider from the availability measurement tools to the time when the System is returned to proper operation.

3.13.1.1.4. "Availability" means the time for which the services and facilities are available for conducting operations on the system Availability is defined as:

{(Scheduled Operation Time — System Downtime) / (Scheduled Operation Time)) * 100%

3.13.1.1.5. "Helpdesk Support" shall mean the 16x6 basis support center which shall handle

Fault reporting, Trouble Ticketing and related enquiries during this contract

3.13.1.1.6. "Incident" refers to any event / abnormalities in the functioning of the Application / Call Centre Equipment / Services that may lead to disruption in normal operations of the Command and Control Centre, System or Application services.

3.13.1.1.7. A Service Level failure will occur if the Solution Provider fails to meet Minimum Service Levels, as measured on monthly basis, for a particular Service Level. An "Availability and Performance Report" will be provided by the Solution Provider on monthly basis in the suggested format and a review shall be conducted based on this report. A monthly Availability and Performance Report shall be provided to the DMA at the end of every month containing the summary of all incidents reported and associated performance measurement for that period. The monthly Availability and Performance Report will be deemed to be accepted by the DMA upon review and signoff by Solution Provider and the DMA where required, some of the Service Levels will be assessed through audits or reports e.g.

Utilization reports, measurements reports, etc., as appropriate to be provided by the Service Provider on a monthly basis, in the formats as required by the DMA. The tools to perform the audit will need to be provided by the Solution Provider.

3.13.1.1.8. However, SLAs will be subject to being redefined, to the extent necessitated by field experience at the ULBs and the solid waste management work package operators and the developments of technology practices globally. The SLAs may be reviewed on an annual / bi-annual basis as the DMA decides after taking the advice of the Solution Provider and other agencies.

3.14. PERFORMANCE MONITORING AND LEVY OF PENALTIES FOR **SERVICE FAILURES**

The Performance of the Applications functioning and all the agreed upon deliverables will be monitored on the basis of the Service Level Agreements (SLAs) as given below. Due penalties will be imposed for the failures as indicated in the table below. The performance will be strictly monitored either by the APMDP / CDMA or a third party PMU or auditing agency.

A. Project Execution Time Line

Sl. No.	Deliverable	Timeline	Penalty
1	**Project Execution** (Application Software Installation, Setting up Call Center and Operations Go Live with all Features)	As per the dates agreed within Two months from the date of entering into the service agreement	Rs 3,500 per delay of each day of delay

B. **SLAs for Software Application Availability, Performance and Error Rectification**

Deliverable	Measurement	
B1. Application Availability	. Availability of solution components included in the software application solution measured within the Command and Communication Center shall be atleast 99.5% . Severity of Violation: High . The service shall be monitored on daily basis	
	Availability over one month period	**Failures for calculation of penalty**
	Between 99.5% and 99%	1
	Between 98.9 % and 95%	2
	Below 95%	3

<table>
<tr><td rowspan="4">B1. Application Performance</td><td colspan="2">Average application response time during peak usage hours as measured from the Command and Communication Center shall not exceed 5 seconds.
. Severity of Violation: High
. The list of critical service functions and peak usage hours will be identified by the DMA.
. The service shall be monitored on a monthly basis</td></tr>
<tr><td>Average application response time over one month period</td><td>Failures for calculation of penalty</td></tr>
<tr><td>Between 5 and 6 seconds</td><td>2</td></tr>
<tr><td>Between 7 and 8 seconds</td><td>4</td></tr>
<tr><td colspan="3">For the SLAs of Application Availability and Performance: For each point of failure, 0.1 % of the monthly payment will be levied as Penalty.</td></tr>
<tr><td colspan="3">B3. Error Rectification</td></tr>
<tr><td>Deliverable</td><td>SLA</td><td>Penalty</td></tr>
<tr><td>Error Rectification in the Application Functioning - Errors in Contractor Payment Amounts, Wrong data representation in the reports and dash boards</td><td>One day</td><td>0.25 % of the monthly payment amount for every day of the delay in error rectification</td></tr>
<tr><td colspan="3">C. STQC Certification</td></tr>
<tr><td>Deliverable</td><td>SLA</td><td>Penalty</td></tr>
<tr><td>STQC Certification for the software Application</td><td>Within 6 months from the Effective Date of Contract Agreement</td><td>Rs 10,000 per delay of each Week</td></tr>
</table>

3.15.SOURCE CODE / ESCROW MANAGEMENTAND EXIT CONDITIONS

3.15.1. The Vendor shall provide the latest version of the Source Codes to the DMA for the all the Customization provided as per the RFP requirements at regular intervals.

3.15.2. Considering various aspects, the DMA has decided that the Source Code of the base Product of the Vendor(RTMS software Application) would have to be deposited in an escrow Account. The vendor shall enter into an escrow agreement with the DMA and escrow agent. Cost of escrow account shall be borne by DMA

3.15.3. Subject to the terms and conditions of the escrow agreement, the DMA shall have the right to get the source code of the Base product of the vendor and will receive no opposition / hindrances from the vendor under the following conditions

- In the event wherein venodr has been declared insolvent / bankrupt
- In the event wherein the vendor declared it expressed / written unwillingness to fulfill his contractual obligations under the RFP conditions
- If the Agreement with the Vendor has been terminated for material breach
- If the Vendor unable to perform the services even after repeated requests / notices from the DMA.

3.15.4. For any technology / Software /Product developed / used / supplied by the vendor for performing services or customizing software for the DMA as part of this RFP, the vendor shall have the valid right to use and right to license for the solution proposed, Any license or IPR violation on the part of the vendor shall not put the DMA at risk.

3.15.5. The Vendor shall grant the DMA a perpetual, irrevocable, non exclusive, unlimited license to access, replicate, modify and use the software including its upgraded version, including all inventions, designs and trademarks and other IPR embodies therein perpetually. Provided, however, the DMA shall have the right to replicate and modify the source code under aforementioned license only after it gets access to the Source Code in accordance with the terms of Escrow Agreement

3.15.6. All the Customization done for the base solution based on this RFP shall be exclusive property of the DMA and the IPR of the base product lies with the Vendor only.

3.15.7. The Vendor represents and warrants that the software developed is free from malware and spyware, free from any obvious bugs, and free from any cover channels in the Code. The versions of the application / software as well as any subsequent version / modifications are free from vulnerabilities.

3.15.8. The source code / object code / executable code and compilation procedures of the software solution should be provided to the DMA through escrow arrangement . All necessary documentation in this behalf should be made available to the DMA. Any update or upgrade to source code should be informed and brought under Escrow.

3.15.9. In the event of failure of the vendor to render the services or in the event of prior termination of the Agreement or expiry of the term or otherwise, without prejudice to any other right, the DMA at its sole discretion may make alternate arrangement for getting the services contracted with another vendor or by self. In such case, the existing vendor shall continue to provide services until new service provider completely takes over the work. During the transition period, the existing vendor shall render all reasonable assistance to the new service provider at no extra cost, for smooth switchover and continuity of services.

4. SECTION -4: OTHER CONTRACT AWARD CONDITIONS

4.1 PROJECTS DELIVERY MODE

Both the Components 1 and 2 are expected to be delivered on Design, Build, Operate and Transfer (DBOT) Model. The system integrator is expected to initially operate the solutions for a three year period, extendable any further periods based on the discretion of the MA&UD department. During this period the System Integrator will solely bear all the costs arising out of operations and maintenance activities, regular upgrades of both hardware and software systems and programmes. The system integrator is also required to engage required technically qualified and experienced staff at all times during the operations of the RTMS.

4.2 SERVICE PROCUREMENT

The Bidder vendor should undertake a comprehensive proof-of-concept (POC) pilot at their own cost before launching the services. The required services will cover all the 110 municipal Urban Local Bodies (ULB) areas and likely to be extended thereupon based upon departmental usage requirements.

The procurement and service contract will be offered through a 'Single Stage Two Parts Proposal process through e-procurement process. In the first part of the stage, the Bidder would be required to meet the minimum threshold technical qualifications (securing 70% score in the technical evaluation) and qualify for undertaking the Project as set out in this RFP. In the second part of the stage, the financial proposals of only those offerors who have cleared the minimum technical qualifications and other terms& conditions as specified in this RFP document, would be opened and evaluated. The final selection will be based on Combined Quality cum Cost Based Selection (QCBS) method. The weightage given to technical and the financial is in the ratio of 70:30.

4.3 PROJECT COST

The service provider is required to quote a lump sum price for both the service components of delivering the complete suite of RTMS solutions, setting up and staffing the call center in the CCC at IGC Velagapudi

4.4 RESPONSIBILITY MATRIX

S.NO	RESPONSIBILITIES	ROLE
1	Solutions Development, Hardware and Software Installation and Comprehensive Operations and Maintenance of the Call Center in coordination with all stakeholders	System Integrator / Solution Developer / vendor

2	Clarification and Knowledge inputs about the service modules	Office of DMA and GO 279 Project Management Unit
3	Supply of storage, DB server space and any other app servers – Cloud Servers	DMA and MAUD Department
4	Project Implementation and Resources Support	DMA and MAUD Department

4.5 INDEMNITY

The Vendor shall fully indemnify the department against the action, claim or demand, costs and expenses arising from or incurred by reasons of any infringement or alleged infringement of any letters patent, registered design, trademark or name, copy right or any other protected rights in respect of the Service Package supplied.

4.6 ARBITRATION

In case of any dispute or any difference between the parties arising out of or in relation to this Contract including disputes or differences as to the validity of this Contract or interpretation of any of the provisions of this Contract, the same shall be resolved by mutual discussion. If the parties fail to settle the dispute or difference mutually, then the same shall be resolved in accordance with and subject to the provisions of the Arbitration and Conciliation Act, 1996 or any modifications or amendments thereto, or any re-enactment for the time being in force. The venue of Arbitration shall be Vijayawada and only courts at Vijayawada shall have exclusive jurisdiction in all such matters.

4.7 NOTICES

Any declaration or any other notice given by one party to the other shall be sent by registered letter, to the address specified for this purpose in the Contract; such declaration or notice shall be legally effective. APMDP's decision in respect of all or any of the above matters shall be final and binding.

4.8 APPLICABLE LAW

The supply of goods and services under this contract will be governed by and construed and interpreted in accordance with the laws of India.

4.9 INSOLVENCY

APMDP may terminate the Contract by giving written notice to without compensation, if the Bidder becomes bankrupt, goes in liquidation or otherwise insolvent, provided that

such termination will not prejudice or affect any right of action or remedy which accrued or will accrue to the department.

4.10 CONFIDENTIALITY

The existence of the Contract and/or any contents thereof shall be kept confidential and shall not be disclosed / used in any form by either party without the written consent of the other party to the Contract.

4.11 COMPLIANCE WITH RULES AND REGULATIONS

The Vendor shall at all times during the currency of Contract conform to and comply with all the regulations and by the laws of the State or Central Government or of DMA and of all other local authorities.

ATTACHMENTS

1. Technical Response Forms T1-T10

2. Financial Response Form – F1

Attachment Forms T1 to T10 for Technical Response for
RTMS Package-1 – Soft Ware Application and Call Center Management
***Note**: After filling in the details, the authorised signatory / signatories should sign all the pages of the documents, scan the signed copies and then upload in the e- procurement portal*

Form T1
Covering Letter
(On the Letter-head of the Bidder)

Date:
To: [Project Director, APMDP]

Sub: Submission of Bid for RTMS Package -1 No(s). ---
Ref: Your Notification No. _____ dated _____

Sir/Madam,

Being duly authorized to represent and act on behalf of bidder and having reviewed and fully understood all of the Bid requirements and information provided and collected, the undersigned hereby submits the bid on behalf of _____ *[Name of Bidder]* for the Work Package No___

We hereby submit the Technical and Financial Bid Forms with the details as per the requirements of the Tender for your evaluation.

We also agree to furnish any clarifications in writing within the stipulated time; and also agree to the condition that failure to do so will result in the rejection of our tender.

We confirm that our Bid is valid for a period of 90 days from _____ [*Bid Due Date*].

Yours truly,

For and on behalf of _____*[Name of Bidder]*

Duly signed by the Authorised Signatory of the Bidder
(Name, Title and Address of the Authorised Signatory)

Form T2
Details of Bidder[1]
(On the Letter Head of the Bidder)

1. (a) Name of Bidder
   (b) Address of the office(s)
   (c) Date of Incorporation

2. Brief description of the Bidder's main lines of business.

3. Details of the Authorised Signatory:

   (a) Name :
   (b) Designation :
   (c) Company/Firm :
   (d) Address :
   (e) Telephone number :
   (f) E-mail address :
   (g) Fax number :
   (h) Mobile number :

4. Details of the individual who will serve as the point of contact / communication on behalf the Bidder:

   (a) Name :
   (b) Designation :
   (c) Company/Firm :
   (d) Address :
   (e) Telephone number :
   (f) E-mail address :
   (g) Fax number :
   (h) Mobile number :

[1]Attach Scan Copies of the Original Company / Entity Incorporation / Registration Certificates and PF, ESI and VAT Registration Certificates

Form T3
Conduct and Anti-Collusion Certificate
(To be notarized on Non-Judicial Stamp Paper of Rs.100)

I / We undertake that, in competing for the contract, I / we will strictly observe the laws against fraud and corruption in force in India namely Prevention of Corruption Act 1988.

I / We declare that our organization or our partners in the JV / Consortium have never been blacklisted by any department / units of Government of India or State Governments or Union Territories in India for any of the reasons of committing serious misconducts or have been charged with committing criminal action(s), or dissatisfaction with the performance of our services, or violation of any terms and conditions of the Agreement. In case if such misconducts are found to have been committed by us with documentary evidences, our contract can be summarily cancelled with the forfeiture of the security and performance guarantees we have executed with the Authority.

I / We hereby certify and confirm that in the preparation and submission of our Bid, I / we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing which is or could be regarded as anti-competitive.

I / We further confirm that I / We have not offered nor will offer any illegal gratification in cash or kind to any person or agency in connection with the Bid.

I / We further acknowledge that on any later date, if it was found that I / We indulged in any of the corrupt activities mentioned in Prevention of Corruption Act 1988, the Authority has the right to take necessary legal action.

Dated this .....Day of ....., 2017

.....
(Name of the Bidder)

.....
(Signature of the Bidder / Authorised Person)

.....
(Name of the Authorised Person)

Those agencies or entities blacklisted by any department / unit of Government of India or State Governments or Union Territories for any of the reasons of committing serious misconducts or have been charged with committing criminal action(s), or dissatisfaction with the performance of the bidder, or violation of any terms and conditions of the Agreement are **not** eligible to participate in this Tender.

Form T4 - Proof of Eligibility (Turnover)
(On the Letter-head of the Bidder)

It is compulsory for the bidder to fill this statement and the bidder must attach only those documents that support this statement

Bid Reference No. ____
Name of Work: _____
Name of Bidder:_____

ELIGIBILITY CRITERIA[2](To be filled by the Bidder)		
2	**TURNOVER in Crores of Rupees**(During the immediate last three consecutive financial years)	
	2015-16	
	2014-15	
	2013-14	

Note: In support of these turnover figures, the bidder is required to attach respective audited balance sheets and IT returns certificates. In case of consortium, the turnover of both the consortium partners will qualify and year wise total turnover will be taken into consideration for arriving at the eligibility qualification.

Form T5 - Proof of Eligibility (Work Experience)
(On the Letter-head of the Bidder)

Details of Experience: The Bidder should furnish the details of eligible experience as set out in the Table below. The proposer can provide any number of work experience details suited to the project and as mentioned in the eligibility criteria

Sl. No.	Description of the work Executed (Project Title, Agency for which work was executed, Duration of the Work, and Work / Services Rendered).	Mention the name of the Documentary Proofs Such as Work Orders, Agreements, Work Completion Certificates, etc.[3]
1		
2		
n..		

Dated this .....Day of ....., 2017
.....
(Name of the Bidder)

.....
(Signature of the Bidder / Authorised Person)

.....
(Name of the Authorised Person)

[3]Without fail, copies of the documents mentioned here should be enclosed with the proposal with proper identification index numbers

Form T6
Undertaking for Maintenance of Fair Labor Practices
(This undertaking should be notarized on Rs.100 stamp paper)

I / we undertake to engage the workers, notified by _____ (mention the name of the Authority) for the works given under this contract.

I / we undertake to follow fair labour practices as per the Acts and Rules applicable in the State of Andhra Pradesh for labour engagement, and indemnify the Authority from any labour encumbrances for the workforce employed in our rolls for executing the works awarded to me/ us through this Tender.

I / we further undertake to rectify the lapses relating to labour laws pointed out by the Authority.

I/we undertake to make payment of monthly wages on or before 7th of succeeding month and also remit the PF and ESI subscriptions on or before the due date.

I/we undertake to submit the bank statements indicating payment of wages to the workers and acknowledge of PF and ESI remittances while claiming the monthly payments for the services.

I/ we undertake that we shall not use any fraudulent methods to subvert the worker payments and their lawful entitlements.

I / we shall maintain the following registers and, submit reports as per relevant Labour Laws and Rules.

i. Register of sanitary workforce employed for this work packages
ii. Muster roll, Register of Wages,Deduction and Over-time registers.
iii. Issue of Wage Slip one day in advance of payment of wages.
iv. Issue of employment card as per the relevant Rules.
v. Submission of half-yearly returns by 30th June and 31st December to Labour Department and the Authority.
vi. Provision of health and welfare measures, such as crèches and first-aid facilities
vii. Registration of our office under Andhra Pradesh Shops and Establishment Act, 1988.

Dated this .....Day of ....., 2017

.....
(Name of the Bidder)

.....
(Signature of the Bidder / Authorised Person)
.....
(Name of the Authorised Person)

Form T7[4]

Power of Attorney for Signing the Bid

(To be notarized on Non-Judicial Stamp Paper of Rs.100)

Know all concerned by these presents, we, …… (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr. / Ms. (Name) ----------, son/daughter/wife of …… and presently residing at ……., who is presently employed with us and holding the position of ……., as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our bid for the …… Project proposed or being developed by Commissioner and Director, Municipal Administration (the "Authority") including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders' and other Meetings and providing information / responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Service Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the said Project and/or upon award thereof to us and/or till the entering into of the Service Agreement with the Authority.

AND, we hereby agree to ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, ……, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS …… DAY OF ……., 2017

……..

(Signature, name, designation and address)

Accepted

[4]The Original to be submitted at the time of Technical Bid Opening

(Signature, name, designation and address of the Attorney)

(Contd...)

Witnesses:

1.

2.

Note:

1. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

2. Wherever required, the Bidder should submit for verification the extract of the charter documents such as a board or shareholders' resolution/ power of the person executing this power of attorney on behalf of the Bidder.

3. For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostille certificate.

Form T8[5]
Power of Attorney for Lead Member of JV / Consortium
(To be notarized on Non-Judicial Stamp Paper of Rs.100)

Whereas the ……. (the "Authority") has invited bids for the ……..... Project (the "Project").

Whereas, ……, and ……(collectively the "Consortium") being Members of the Consortium are interested in bidding for the Project in accordance with the terms and conditions of the Tender Document and other connected documents in respect of the Project, and

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the Project and its execution.

NOW THEREFORE KNOW ALL CONCERNED BY THESE PRESENTS

We, …… having our registered office at ……, and ……, having our registered office at ……, (hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorize ……, having its registered office at ……, being one of the Members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (hereinafter referred to as the "Attorney") and hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the Contract, during the execution of the Project, and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, accept the Letter of Award, participate in bidders' and other meetings, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the JV/ Consortium and generally to represent the JV / Consortium in all its dealings with the Authority, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the JV's / Consortium's bid for the Project and/ or upon award thereof till the Contract is entered into with the Authority.

[5] The Original is to be submitted at the time of Technical Bid Opening

AND, hereby agree to ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS …… DAY OF …….., 2017

For ……...
(Signature, Name & Title)

For …….....
(Signature, Name & Title)

(Executants)
(To be executed by all the Members of the JV / Consortium)

Accepted

(Signature, name, designation and address of the Attorney)

Witnesses:

1.

2.

Note:

1. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
2. Wherever required, the Bidder should submit for verification the extract of the charter documents such as a board or shareholders' resolution/power of the person executing this power of attorney on behalf of JV / Consortium.
3. For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostle certificate.

Form T–9[6]

CONSORTIUM AGREEMENT

(To be notarized on Non-Judicial Stamp Paper of Rs.100/-)

This Consortium Agreement executed on this ……. day of …… TwoThousand and Seventeenby:

M/s…….. a Company / Partnership Firm / Sole Proprietorship Organization incorporated under the Act/Laws of …… and having its Registered / Head office at……. (hereinafter called the "Lead Member" which expression shall include its successors); **and**
M/s …….. aCompany/ Partnership Firm/ Sole Proprietorship Organization incorporated under the Act/Laws of ……. ……. And having its Registered/Head office at…… (hereinafter called the "Partner" which expression shall include its successors) shall collectively hereinafter be called as the "Consortium Members" for the purpose of submitting a bid to APMDP having its office at Kavyasri Residency, 1st Floor, MG Inner Ring Road, Reddypalem, Guntur, AP - 522509 Andhra Pradesh, India (hereinafter called the "Authority") in response to the invitations of bids for "Real time Monitoring System (RTMS) Package -1 (the "Project") on Design, Build, Operate and Transfer (DBOT) basis." as per the Scope of Work stipulated in the Tender Documents (hereinafter called as "The Transaction").

Whereas Qualification/ Eligibility Criteria of the Tender Document, stipulates that maximum of two bidders may form a JV or Consortium between themselves and apply for this Tender, provided they fulfil the following eligible criteria;

1. They should have legally valid Consortium Agreement as per the prescribed format for the purpose of participation in the bidding process and the total number of members in a Consortium shall be limited to two.
2. Consortium as a whole shall meet all the qualifying norms specified in the Tender.
3. All the Consortium member(s) shall authorize the lead member by submitting a Power of Attorney as per the prescribed format duly signed by them. The Lead Member shall be authorized to receive instructions for and on behalf of all member of the Consortium and entire execution of the contract.
4. The Consortium and its members shall be jointly and severally responsible and be held liable for the purpose of guaranteed obligation and any other matter as required under the contract.
5. Work Order (Letter of Award) will be placed on theLead Member of the Consortium.
6. In addition to the above, the Lead Member should submit the following documents as qualifying terms.
    - Certificate of Entity Registration

[6]The Original is to be submitted at the time of Technical Bid Opening

- PAN

And whereas the members of the Consortium together shall strictly comply with the Qualification/Eligibility Criteria of the Tender Document

And whereas bid has been proposed to be submitted to APMDP having its office at Kavyasri Residency, 1st Floor, MG Inner Ring Road, Reddypalem, Guntur, AP - 522509
Andhra Pradesh, India by the Lead Member based on this Consortium Agreement signed by the members

Now This Indenture Witnessed As Under:

In consideration of the above premises, in the event of the selection of Consortium as successful bidder, all the parties to this Consortium Agreement do hereby agree to abide themselves as follows:

1. M/s……. shall act as the Lead Member for and on behalf of Consortium/ Consortium Members. The said Consortium / Consortium Members further declare and confirm that they shall jointly and severally be bound and shall be fully responsible to Director, Municipal Administration for Providing the Services for a period of 3 (three) years and for a further period of 2 (two) years in case the Contract Period is extended as per the Scope of Work based on successful performance of the works. Any breach of roles and responsibilities (as specified hereunder) by the other Member(s) of the Consortium agreement doesn't indemnify the Lead Member of safeguarding himself from performing his duties and full execution of the contract. In case of default by the other Member(s), the entire responsibility financial or otherwise rests with the Lead Member. Lead Member will not be absolved of complete responsibility and suitable action.

2. If the Municipal Administration Department suffers any loss or damage on account of any breach of the Contract or any shortfall in meeting the Service Agreement as per the specifications in terms of the Contract, the Members of the Consortium undertake to promptly make good such loss or damages caused to theMunicipal Administration Department, on its demand without any demur. The obligation of each of the member is absolute and not independent of the Consortium or any member.
3. The liability of the members of this Consortium agreement to the Municipal Administration Department, with respect to any of the claims arising out of the performance or non-performance of the obligations set forth in the said Consortium Agreement, read in conjunction with relevant conditions of the Service Agreement, shall not be however limited in any way so as to restrict or limit the liabilities of any of the members of the Consortium Agreement. The liability of each member is absolute and not severable.
4. It is expressly understood and agreed between the Members to this Consortium Agreement that the responsibilities inter se amongst the Members shall not in any way be a limitation of joint and several responsibilities and liabilities and shall ensure performance under the

agreement, the same shall be deemed to be a default by all the Consortium Members. It will be open for Municipal Administration Department to take any steps, punitive or corrective action including the termination of contract in case of such default.

5. This Consortium Agreement shall be construed and interpreted in accordance with the laws of India and Andhra Pradesh and shall be subject to exclusive jurisdiction within Andhra Pradesh in all matters arising there under.
6. In case of an award of a Contract, all the Members to the Consortium Agreement do hereby agree that the Consortium as whole shall furnish Performance Guarantee by way of an irrevocable & unconditional Bank Guarantee for 5% of the Annual Contract Value in the prescribed format and as per terms of the Service Agreement.
7. It is further agreed that the Consortium Agreement shall be irrevocable and shall form an integral part of the Contract, and shall continue to be enforceable till the Municipal Administration Department terminates the same. It shall be effective from the date first mentioned above for all purposes and intents.
8. In case of any dispute amongst the members of the Consortium, Municipal Administration Department shall not be in any way liable and also the Consortium Members shall not be absolved from the contractual obligation in any manner.
9. It is further understood and agreed by all the Members of the Consortium that in case the Contract is awarded to JV or Consortium, the JV and Consortium arrangement should remain the same throughout the contract period. The whole entity will be jointly and severally responsible for the obligations it has to fulfill as per the Service Agreement.
10. It is also further understood and agreed that in the event of any member of the whole entity (Consortium) pulls out of the JV/ Consortium or if the lead partner disengages the other member of the Consortium, the total contract award will be annulled with one month notice and the Municipal Administration Department will take necessary steps as it deems fit. The JV / Consortium shall forfeit the EMD and Performance Guarantee.

In Witness thereof, the Members to the Consortium Agreement have through their authorized representatives executed this Consortium Agreement and affixed Common Seals of their companies, on the day, month and year first mentioned above.

1. Common Seal of …….. for the Lead Member has been affixed in my /our presence Pursuant to the Board of Director's resolution dated……..

(Signature of authorized representative)
Name…….
Designation……Common Seal of the Company

2. Common Seal of …….. for Partner has been affixed in my / our presence Pursuant to the Board of Director's resolution dated……..

(Signature of authorized representative)
Name…….
Designation……Common Seal of the Company

WITNESSES:

1……	2……
(Signature)	(Signature)
Name……	Name……
(Official address)	(Official address)

FORM T10:
(On the Letter-head of the Bidder)

Technical Details of the Solutions Given and Implementation Methodology
(To be submitted by the bidder along with the Bid in the e-Procurement portal)

The bidder is required to detail the plans he is intending to carry out against each of the parameter given in the Table below. The bidder can provide the technical details in the manner suitable to prove its capability to execute the project in its entirety, meeting all the quantitative, qualitative and end result requirements.

Technical Details	Bidders Solutions and Implementation Approach and Methodology
i. Software Application - Solution Framework and Architecture (scalability, process flow management, Data Analytics, Dashboards for daily operations management and Dashboards for Strategic Decisions)	
ii. Implementation Activities at the Command and Communication Center a) Software Application Administration b) Call Center – Operations and Maintenance c) Staff Management	
iii. Implementation and handholding the ULBs and the Solid Waste Management Service providers for diligent adoption of RTMS System	
iv. Envisaged Risks in Application Implementation and Mitigation Plans	
v. Data Security Risks -Identification and Mitigation Plan	
vi. Planned Interface activities with the	

Cloud Services Vendor	
vii. Exit Plan – To enable the department develop contingency plans	
viii. Availability of SOPs Online and Offline	
ix. Detailed quantities and specifications of the hardware proposed for Application Implementation and call center management	
x. Any other relevant points to prove that the vendor has come up with comprehensive plan for successful implementation of the project throughout the project period.	

Form F1
Financial Offer for the Project

***(Note:** After filling in the details in the Letterhead of the Lead Bidder, or the Consortium as a whole, the authorized signatory / signatories should sign all the pages of the documents scan the signed copies and then upload in the e- tender portal. For any descriptions and explanations for the services and materials supplied / maintained by the bidder, respective documents can be attached, with proper index marking in the Financial Offer Form given below.)*

Form F1
Financial Offer for the Project

Date:

To
The Project Director, APMDP

Sub: Financial Bid for RTMS Package No.1

Ref: **Tender Notification No:** **Date:**

Sir/Madam,

Having gone through this Tender document and having fully understood the Scope of the Project and the Scope of Work for the Project as set out by the Project Director, APMDP in the RFP, I / we are pleased to inform that I / we would deploy the following resources for undertaking all the activities involved in our proposal. We also quote the amount that we would be charging from APMDP. The quote is exclusive of all applicable taxes

A. CAPEX Responsibilities	**Financial Quotation**	**Bidder's Quote in INR**
(1)	**(2)**	**(3)**
1. Software Application Development, Installation, Commissioning and Go Live. 2. Call Centre Hardware - Supply, and Installation (Refer Annexure -1 for Requirements)	The Bidder is required to quote one lumpsum amount for all the CAPEX and OPEX activities for the entire project period of three	Total Amount for the CAPEX and
B. OPEX Responsibilities		

3. Operations and Maintenance (O&M) of Software Application and Call Centre Activities- • Error tracking and debugging • Adding new reports and Dashboards • Code rewriting for better performance • Version upgrades • Version enhancements • Comprehensive user support • Technical troubleshooting • Performance monitoring • Performance testing • Quality assurance testing • Documentation development and maintenance 4. Deployment of Five Technical executives at the Command and Communication Center Project Manager - 1 No. Software Engineers – 4 Nos.	years. The price quote should be inclusive of all the personnel and service costs incurred towardsSoftware Application Development, Installation, Commissioning and Go Live. Call Centre Hardware - Supply, and Installation Software O&M of Software Application, any License Renewal and all such associated costs	OPEX activities combined. In Figures: In Words:

I / we have reviewed all the terms and conditions of the RFP and would undertake to abide by all the terms and conditions contained therein. I / we hereby declare that there are and shall be no deviations from the stated terms in the Tender Document.

Yours faithfully,

For and on behalf of (*Name of Bidder*)

Duly signed by the Authorized Signatory of the Bidder
(Name, Designation, Address and official stamp of the Authorized Signatory)